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N1 Semestral Report

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GEORGIA: Livable Cities Investment Project for Balanced Regional Development

(Financed by the Asian Development Bank)

Prepared by: Municipal Development Fund (MDF) of Georgia for the Asian Development Bank

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Abbreviations

ACM	-	Asbestos Containing Material
ADB	-	Asian Development Bank
Covid-19	-	Coronavirus Disease 2019
CSC	-	Construction Supervisory Consultant
EA	-	Executing Agency
EARF	-	Environmental Assessment and Review Framework
EHS	-	Environmental, Health and Safety
EIA	-	Environmental Impact Assessment
EMP	-	Environmental Management Plan
ERP	-	Emergency Response Plan
GoG	-	Government of Georgia
GRC	-	Grievance Redress Commission
GRM	-	Grievance Redress Mechanism
HSP	-	Health and Safety Plans
IA	-	Implementing Agency
IEE	-	Initial Environmental Examination
JV	-	Joint Venture
LCIP	-	Livable Cities Investment Program
MDF	-	Municipal Development Fund
MoEPA	-	Ministry of Environmental Protection and Agriculture
MRDI	-	Ministry of Regional Development and Infrastructure
NACHP	-	National Agency for Cultural Heritage Preservation
PPE	-	Personal Protection Equipment
SAEMR	-	Semi-Annual Environmental Monitoring Report
SEP	-	Stakeholder Engagement Plan
SPS	-	Safeguard Policy Statement
SSEMP	-	Site-Specific Environmental Management Plan
SWM	-	Solid Waste Management
SWMCG	-	Solid Waste Management Company of Georgia
WMP	-	Waste Management Plan
WWTP	-	Wastewater Treatment Plant

1. INTRODUCTION

1.1. Preamble

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for **Livable Cities Investment Project for Balanced Regional Development (LCIP).**

2. This report is the 1st (first) EMR for the project, since the loan effectivity date is April 7, 2022. The report only covers the period of April –June.

1.2. Headline Information

3. The Asian Development Bank (ADB) and the Government of Georgia (GoG) reoriented urban sector operations to provide integrated and programmatic solutions for developing Livable cities in Georgia that are economically competitive, socially inclusive, and environmentally resilient. The government has proposed to process the Livable Cities Investment Program (LCIP) to improve urban and tourism infrastructure and services across Georgia. The Livable Cities Investment Project for Balanced Development (LCIP) is sector loan project for a total loan amount of $120 million (equivalent in Euro) will improve livability and inclusive economic growth in the regions and Tbilisi in Georgia. The project will improve the quality of life of 1,184,800 people in Tbilisi and 354,730 people in the regions with inclusive and climate-resilient urban infrastructure and services, improved accessibility, connectivity and economic competitiveness, and enhanced institutional capacity. The project will upgrade city centers, public spaces, and parks, restore cultural heritage buildings and natural heritage sites, upgrade roads, construct community infrastructure such as kindergartens, library and e-learning center, sport facilities, and tourism facilities.

4. All projects funded by ADB must comply with ADB Safeguard Policy Statement (SPS), 2009. ADB SPS aims to help developing member countries address environmental and social risks in development projects and minimize and mitigate, if not avoid, adverse project impacts on people and the environment. The SPS applies to all ADB-supported projects and ADB works with borrowers to put policy principles and requirements into practice through project review and supervision, and capacity development support. The SPS also provides a platform for participation by affected people and other stakeholders in project design and implementation.

5. The Livable Cities Investment Program (LCIP) has been classified as Category B per ADB SPS thus an initial environmental examination (IEE) is required for activities to be considered under the project. All IEEs have been discussed with relevant stakeholders.

6. IEEs, including EMP, form an integral part of contractors' contract document and is obligatory to be fulfilled. Therefore, Contractors were required to develop Site Specific Environmental Management Plan (SSEMP) before commencement of the construction works.

2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1. Project Description

7. The Municipal Development Fund of Georgia (MDF) is the executing agency of the Livable Cities Investment Program. The LCIP includes 28 subprojects, among which 22 are ongoing. The rest 6 are either planned or under ongoing tendering procedures. The following Sub-Projects are ongoing for rehabilitation of the central Part of Velistsikhe Village and construction of sport-complexes in Zugdidi, Akhaltsikhe and Rustavi, swimming pool in Kutaisi and kindergartens in Kutaisi, Poti, Supsa, Khajalia, Senaki, Dzveli Anaga, Kvemo Bodbe, Bandza, Didichkoni, Chiauri, Chabukiani, Chitatskaro, Rukhi, Vardisubani, Kurdghelauri, Shamgona, Tsintskaro. The list of the SPs, statuses and dates together with Constructing Contractors are given in the Table 1.

Table 1. Subprojects

№	Subproject	Status		Constructing Company
1.	Kutaisi Swimming Pool	21-04-21	21-10-22	LTD “Saba Construction”
2.	Zugdidi Sport Complex	23-04-21	23-10-22	Jiangsu Nantong Sanjian Construction Group Co. Ltd (China)
3.	Akhaltsikhe Sport Complex	23-04-21	25-11-22	Jiangsu Nantong Sanjian Construction Group Co. Ltd (China)
4.	Rustavi Sport Complex	21-04-21	21-12-22	Ltd “Arali”
5.	Velistsikhe Urban Upgrade	23.12.2021	21.09.23	Jv “Insi” & “Java” Ltd
6.	Construction of Zugdidi Library	Ongoing Tendering Procedures		-
7.	Telavi Urban Upgrade	Planned		-
8.	Kutaisi Kindergarten	07-01-22	07-02-23	LTD “Satave+”
9.	Poti Kindergarten	07-01-22	07-04-23	LTD “Prime Beton”
10.	Supsa Kindergarten	22-12-21	22-03-23	LTD “Kartuli Samsheneblo Jgupi”
11.	Khajalia kindergarten	22-12-21	22-03-23	LTD “Kartuli Samsheneblo Jgupi”
12.	Senaki Kindergarten	07-01-22	07-04-23	LTD “Prime Beton”
13.	Dzveli Anaga Kindergarten	10-01-22	10-03-23	LTD “Instali”
14.	Kvemo Bodbe Kindergarten	11-01-22	11-03-23	LTD “Instali”
15.	Bandza Kindergarten	12-04-22	12-07-23	JV “Abeka” & “Arktrade” LTD
16.	Didichkoni Kindergarten	23-12-21	16-05-23	LTD “Kartuli Samsheneblo Jgupi”
17.	Chiauri Kindergarten	11-01-22	11-03-23	LTD “Instali”
18.	Chabukiani Kindergarten	12-04-22	12-07-23	JV “Abeka” & “Arktrade” LTD
19.	Chitatskaro Kindergarten	14-04-22	08-07-23	JV “Abeka” & “Arktrade” LTD
20.	Rukhi Kindergarten	14-04-22	08-07-23	JV “Abeka” & “Arktrade” LTD
21.	Darcheli Kindergarten	Ongoing Tendering Procedures		-

22.	Vardisubani Kindergarten	13-01-22	13-03-23	JV “Produce Investment” & “Metag Insaat Tikaret Anonim Sirket” LTD
23.	Shamgona Kindergarten	13-01-22	13-03-23	JV “Produce Investment” & “Metag Insaat Tikaret Anonim Sirket” LTD
24.	Kurdghelauri Kindergarten	18-01-22	18-04-23	LTD “Satave+”
25.	Partskhisi Kindergarten	Ongoing Tendering Procedures		-
26.	Tsintskaro Kindergarten	24-01-22	23-04-23	JV “Produce Investment” & “Metag Insaat Tikaret Anonim Sirket” LTD
27.	Agara Kindergarten	Ongoing Tendering Procedures		-
28.	Laghami Urban Upgrade	Planned		-

2.1.1. Construction of Sport-Complex in Zugdidi

8. The project envisages construction of the sport complex in Zugdidi. Large swimming pool (33X25 m), small pool (16X8 m), gym and hall for weight lifting will be located on the first floor of the building. According to norms, large pool capacity is 80 persons per day. The small pool will serve children under 14 years of age. Capacity - 20 child per shift. Seats for 200 spectators will be arranged within large pool hall. Both pools and halls are directly connected to the dressing rooms with showers. The open-air café and small shop will be arranged in vestibule. Technical rooms, storage and other spaces will be arranged on the first floor as well. Boxing and wrestling halls with dressing rooms and showers will be located on the second floor of the building. Rooms for administration and conference hall will be arranged on second floor as well. Conference hall is connected with open terrace. The project includes adaptations for the disabled persons. Parking for cars will be arranged for 100 cars and 3 buses. The landscaping of surrounding is envisaged by the project design as well. The sport complex area will be fenced.

9. The project area (cadastral code: 43.31.71.114) is located in the south part of Zugdidi, Bendeliani street. Private houses with gardens, cornfields and nuts plantations are located around the project site. There are no large industrial facilities in the vicinities of project area. The terrain of the place is flat, maximal difference between the levels is 1.2 m. The land plot selected for swimming pool construction is registered as municipal property.

10. In order to increase the energy efficiency of the building in the exterior wall will be constructed with concrete blocks with foam inner insulation. Exterior stained glasses windows will be arranged by double glass packages. To ensure thermal insulation of the ceilings stone wool and pumice will be used. The roof will be arranged with sandwich panels. The total area of the project site is 13 015 m2, including parking and backyard. On ground area of the sport complex building is 3551,1 m2. Building of sport complex is two storied. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

Figure 1. Site location - Zugdidi Sport Complex

2.1.2. Construction of Sport-Complex in Akhaltsikhe

11. The project envisages construction of the sport complex in Akhaltsikhe (cadastral Code: 62.09.63.183) (see figure 2). The total area of the land plot allocated for sports complex

construction is 13 394 m2, including parking and backyard. The sports complex building will be constructed on the west side of the land plot on the 4000 m2 area. On ground area of the sport complex building is 3551,1 m2 and total area – 7795,4 m2. Height of the building will be 15,6 m. Main vestibule, Large swimming pool (33X25 m), small pool (16X8 m), gym and hall for weight lifting will be located on the first floor of the building. Both pools and halls are directly connected to the dressing rooms with showers. The open-air café and small shop will be arranged in vestibule. Technical rooms, storage and other spaces will be arranged on the first floor as well. Boxing and wrestling halls with dressing rooms and showers will be located on the second floor of the building. Rooms for administration and conference hall will be arranged on second floor as well. Conference hall is connected with open terrace. According to norms, large pool capacity is 80 persons per day. The small pool will serve children under 14 years of age. Capacity - 20 child per shift. Seats for 200 spectators will be arranged within large pool hall. The project includes adaptations for the disabled persons. The special ramps for disabled persons will be arranged. Adapted water closets will be provided. Elevator will be installed. Parking for cars will be arranged for 100 cars and 3 buses. The landscaping of surrounding is envisaged by the project design as well. The sport complex area will be fenced.

Figure 2. Site location – Akhaltsikhe Sport Complex

2.1.3. Construction of Sport-Complex in Rustavi

12. Construction of sport complex in Rustavi is one of the project, implemented under the Livable Cities Investment Program. The project area is located at the north-east part of Rustavi, David Aghmashenebeli Street. The total area of the project site is 25 469 m2, including parking and backyard. The sports complex will be a two-story building with the total area of 8635.77 m2 and on ground area of 5793,4 m2. The main entrance, the central vestibule and main hall (height 10.5 m) are located at its center. Audience tribune with 1416 seats will be located at the central vestibule side. All required areas will be arranged symmetrically around the main hall, including the gym, boxing hall, dressing rooms with showers, conference room, inventory storage room, staff room, bathrooms. The central vestibule will feature an open-air café, a cashier desk, fast food stalls and sports equipment shops. A security room, storage space and one for engineering communications will be located to the left of the vestibule. Referee rooms will be isolated, nearby the central hall. For fire and evacuation purposes, the building will have several emergency exits. A ramp will be provided at the entrance for people with disabilities, and two panoramic elevators will be installed in the main vestibule. On the second floor, there will be rooms for administration and technical personnel. Parking for cars will be arranged. The landscaping of surrounding is envisaged by the project design as well. Pedestrian paths and lighting will be arranged. The sport complex area will be fenced.

Figure 3. Site location – Rustavi Sport Complex

2.1.4. Construction of Swimming Pool in Kutaisi

13. The project envisages construction of new sport complex in Kutaisi, which includes large swimming pool (50X25 m) and small pool (16X10 m). In accordance with the standards, the pool capacity is considered for 120 swimmer in a shift. Capacity of small pool considers 20-25 swimmers in a shift. Both pools are directly connected to the dressing rooms with showers. 500 seats for audience, gym, the entrance hall with an open-air café, small shop will be arranged as well. The sport complex also includes arrangement spaces for administration, technical storage and open air terrace, lobby and corridors, sauna, trainers' hall, auxiliary facilities. The project includes adaptations for the disabled persons. The special ramps for disabled persons will be arranged. Space for disabled persons on the tribunes will be allocated and equipped properly. Water closets will be provided. Elevator will be installed. Parking for 40 cars will be arranged. The landscaping of surrounding is envisaged by the project design as well. The sport complex area will be fenced.

14. Building of sport complex is one storied. Height of the hall of large swimming pool is 12 m. The height of the rest part of the building is 4 m. Exterior and roof of large poll hall are constructed from polyurethane foamed sandwich panels with 6 cm thickness, in order to increase the energy efficiency of the building. Lower part of building will roofed with reinforced concrete.

15. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

16. Boiler, central conditioning and chiller will be installed. Heating and cooling system is being designed in the halls of swimming pools, training hall and rooms of administration with floor fan coils. In the showers and toilets will heat with steel panel radiators.

17. Source of the heat supply is the boiler installed on the lower part of building. Boiler capacity is 2490 kW. Heating and ventilation systems are considered Δt=75-600C.

18. The building will be cooled by two chillers with capacity 2X525 kW capacity. Cold supply systems are considered for Δt=7-1200C.

19. Water supply will be provided from city network. Water consumption is calculated as 42 m3 per day. Water consumption is recorded through water meter. Temperature is maintained through water circulation. It is considered to install mounted water pipe well of the territory, where is considered equipment of water skater. Sewage system will be connected to the city network.

Figure 4. Site location – Kutaisi Swimming Pool

2.1.5. Construction of Kindergarten in Dzveli Anaga

20. The project envisages construction of new Kindergarten in Dzveli Anaga. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

21. The site selected for the construction of Kindergarten is located at the west part of city Sighnaghi, on the Dzveli Anaga, near the Tbilisi-Gurjaani-Sighnaghi road. The construction of a new Kindergarten is planned and the location is confirmed, which is the more convenient taking into consideration the existing infrastructure of the district, transport links, etc. The selection of the proposed site for the building seems reasonable because it is located in the residential area and appropriate because in the existing plot there is enough space to build a new infrastructure for Kindergarten, including building and parking. The area (cadastral code: 56.08.55.151) The land plot allocated for the construction is free of buildings and registered as municipal property. Therefore, there will be no involuntary as well as voluntary resettlement.

Figure 5. Site location – Kindergarten in Dzveli Anaga

2.1.6. Construction of Kindergarten in Kvemo Bodbe

22. The site selected for the construction of Kindergarten is located at the west part of city Sighnaghi, on the Kvemo Bodbe, near the Tbilisi-Gurjaani-Sighnaghi road. The construction of a new Kindergarten is planned and the location is confirmed, which is the more convenient taking into consideration the existing infrastructure of the district, transport links, etc. The selection of the proposed site for the building seems reasonable because it is located in the residential area and appropriate because in the existing plot there is enough space to build a new infrastructure for Kindergarten, including building and parking. The area (cadastral code: 56.10.46.217) The land plot allocated for the construction is free of buildings and registered as municipal property. Therefore, there will be no involuntary as well as voluntary resettlement.

23. The project envisages construction of new Kindergarten in Kvemo Bodbe, In accordance with the standards. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

Figure 6. Site location – Kindergarten in Kvemo Bodbe

2.1.7. Construction of Kindergarten in Chiauri Sub-Project

24. The site selected for the construction of Kindergarten is located at the west part of city Lagodekhi, on the Chiauri, near the Tbilisi-Gurjaani-Lagodekhi road. The construction of a new Kindergarten is planned and the location is confirmed, which is the more convenient taking into consideration the existing infrastructure of the district, transport links, etc. The selection of the proposed site for the building seems reasonable because it is located in the residential area and appropriate because in the existing plot there is enough space to build a new infrastructure for Kindergarten, including building and parking. The area (cadastral code: 54.06.57.029) The land plot allocated for the construction is free of buildings and registered as municipal property. Therefore, there will be no involuntary as well as voluntary resettlement.

25. The project envisages construction of new Kindergarten in Chiauri, In accordance with the standards. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

Figure 7. Site location – Kindergarten in Chiauri

2.1.8. Construction of Kindergarten in Chabukiani Sub-Project

26. Typical project is designed for construction of kindergartens with a capacity of 100 children in different municipalities of Georgia. The kindergarten will be a two-story building, with a total area 2336,5 m2, of which 980.5 m2 on the ground area. The kindergarten building will include setting up of bedrooms, playing rooms, cloakrooms, canteen, storing rooms, hall and administration rooms, washing rooms, kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms).The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 8. Site location – Kindergarten in Chabukiani

2.1.9. Construction of Kindergarten in Vardisubani Sub-Project

27. The construction of the kindergarten is planned on the nonagricultural plot of land owned by LEPL Telavi Municipality, with cadastral code is 53.08.40.050. the total area of the plot is 4262 sqm. The plot of land is located in the village Vardisubani.

28. The project area is bordered by the Akhmeta-Telavi-Bakurtsikhe highway of domestic importance from one side and agricultural plots of land are located adjacent to the project area with residential houses on it.

29. According to the project, it is planned to construct two-storied building accommodating 180 children (6 groups). The kindergarten building development area is 896.40 m2 and the total construction area is 1344.6 m2. According to the standard project of kindergarten construction, master plan includes construction of kindergarten building and facility works in particular, asphalting, putting concrete slabs, planting of greenery, lightening works, construction of sand and mild surface playgrounds and sheds.

Figure 9. Site location – Kindergarten in Vardisubani

2.1.10. Construction of Kindergarten in Kurdghelauri Sub-Project

30. The project envisages construction of new kindergarten for 6 groups (120 children) in village Kurdghelauri. The area under construction of the new garden building is 896,4 sq.m, and the total area is 1344,6 sq.m. The rest of the land plot will be used for arrangement of kindergarten yard, including playgrounds and green areas. Modern style façade will be arranged with cheerful colors (blue, white and orange). The colorful circle glass case will be arranged at the main entrance of the building. Bedrooms, playrooms, dressing rooms, a buffet, a hall, storage area for products, rooms for administration, doctor, a kitchen, an elevator, an evacuation ladder and a boiler room. Taking into consideration climatic conditions of the region, the façade of the building will be thermally insulating, low emission glass-packs will be installed as well to ensure reduction of energy consumption. Fire safety, water supply, sewage, air ventilation and heating systems will be arranged as well. Arrangement of the bore hole is envisaged by the project to provide kindergarten building with water/ Water supply will be provided from the existing water supply network. The project envisages installation of the biological treatment unit/device for sewage waters with the capacity 14 m3/per day. The building will be provided with a ramp and elevators for people with disabilities.

31. There is a ruin of old building on the area selected for the project. Local government is responsible to demolish existing building and removal of the construction waste from the site, before commencement of the construction works.

Figure 10. Site location – Kindergarten in Kurdghelauri

2.1.11. Construction of Kindergarten in Tsintskaro Sub-Project

32. According to the project, it is planned to construct two-storied building with modern style façade and cheerful colors accommodating 100 children.

33. According to the project, the kindergarten will be equipped with bedrooms, playrooms, changing rooms, dining room, storerooms, lobby, administrative rooms, laundry rooms, kitchen, evacuation stairs. The project also foresees arrangement of benches, sheds, playgrounds, waste bins and fountains on the remaining part of the project area. The project includes arrangement of a boiler room and wastewater biological treatment plant. Drilling of a water wall is planned for providing water supply of the kindergarten building. The project incorporates arrangement of engineering network of the building: water-piping, sewerage system, heating system, ventilation ad etc., in addition it is planned to install thermal insulation of the building for which low emission mini package will be used which will ensure decrease in energy resources usage and budget saving.

34. The project plans building of 6m3 capacity waste water biological treatment plant. For providing water supply of the kindergarten, the project plans drilling of a well with filter pumps, pressure control box, arrangement of upper part of the well, water meter box and water disinfection system. Hot water and heating will be proved from the boiler installed on the project area.

Figure 11. Site location – Kindergarten in Tsintskaro

2.1.12. Construction of Kindergarten in Didichkoni Sub-Project

35. The project envisages construction of new Kindergarten in Didichkoni, In accordance with the standards. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

36. The area under construction of the new garden building is 1000 sq. m. The facade of the building will be decided in a modern style and cheerful colors. The new two-story building will be located at the extreme north point of the project land plot, and the rest of the yard will be used to arrange entertainment grounds, attractions and a recreation area. The project envisages thermal insulation of the building, low emission glass package will be used, which will further reduce energy consumption and save budget. The new kindergarten will feature bedrooms and playrooms, dressing rooms, a buffet, a pantry, a hall, a storage room for products, a doctor, an administration, a dishwasher, a kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms). The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 12. Site location – Kindergarten in Didichkoni

2.1.13. Construction of Kindergarten in Supsa Sub-Project

37. The project envisages construction of new Kindergarten in Supsa, In accordance with the standards. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

38. The area under construction of the new garden building is 1000 sq.m. The facade of the building will be decided in a modern style and cheerful colors. The new two-story building will be located at the extreme north point of the project land plot, and the rest of the yard will be used to arrange entertainment grounds, attractions and a recreation area. The project envisages thermal insulation of the building, low emission glass package will be used, which will further reduce energy consumption and save budget. The new kindergarten will feature bedrooms and playrooms, dressing rooms, a buffet, a pantry, a hall, a storage room for products, a doctor, an administration, a dishwasher, a kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms). The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 13. Site location – Kindergarten in Supsa

2.1.14. Construction of Kindergarten in Khajalia Sub-Project

39. The project envisages construction of new Kindergarten in Khajalia, In accordance with the standards. The project envisages installation of power, internal water supply and sewage networks, heating and cool systems, lightening, fire extinguishing system.

40. The area under construction of the new garden building is 1000 sq. m., and the total area is 6500 sq. m. The facade of the building will be decided in a modern style and cheerful colors. The new two-story building will be located at the extreme north point of the project land plot, and the rest of the yard will be used to arrange entertainment grounds, attractions and a recreation area. The project envisages thermal insulation of the building, low emission glass package will be used, which will further reduce energy consumption and save budget. The new kindergarten will feature bedrooms and playrooms, dressing rooms, a buffet, a pantry, a hall, a storage room for products, a doctor, an administration, a dishwasher, a kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms). The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 14. Site location – Kindergarten in Khajalia

2.1.15. Construction of Kindergarten in Shamgona

41. The construction of the kindergarten is planned on the nonagricultural plot of land owned by LEPL Zugdidi Municipality, with cadastral code is 43.16.42.181. The plot of land is located in the village Shamgona adjacent to the public school of the same village. There is old, depreciable building on the construction area.

42. According to the project is planned to construct two-storied building with modern style façade and cheerful colors accommodating 75 children (3 groups). Kindergarten building development area is 3040 m2 and the total construction area is 1579,1 m2. According to the standard project of kindergarten construction, master plan includes construction of kindergarten building and facility works in particular, asphalting, putting concrete slabs, planting of greenery, lightening works, construction of sand and mild surface playgrounds and sheds.

43. The project plans building of 6m3 capacity waste water biological treatment plant. For providing water supply of the kindergarten, the project plans drilling of a well with filter pumps, pressure control box, arrangement of upper part of the well, water meter box and water disinfection system. Hot water and heating will be proved from the boiler installed on the project area.

Figure 15. Site location – Kindergarten in Shamgona

2.1.16. Construction of Kindergarten in Poti

44. The project envisages construction of new kindergarten for 4 groups children (100 children) in city Poti, Poti Municipality (Samegrelo-Zemo Svaneti region).

45. According to the project design the development area of the new two-story kindergarten building is 980.4 m2. Total construction area is 2336,5 m2 including parking and playgourn areas. The project includes arranging of kindergarten for 4 groups (100 children). The kindergarten building will include setting up of bedrooms, playing rooms, cloakrooms, canteen, storing rooms, hall and administration rooms, washing rooms, kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms).The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 16. Site location – Kindergarten in Poti

2.1.17. Construction of Kindergarten in Rukhi

46. The project covers construction of kindergarten in the V. Rukhi. V. Rukhi is situated in Western Georgia and is 330 km away from Tbilisi via motor- road. The building to be constructed on the area of 980.52 m2. The project includes arranging of kindergarten for 4 groups - 100 children in V. Rukhi. The kindergarten building will include setting up of bedrooms, playing rooms, cloakrooms, canteen, storing rooms, hall, administration rooms, washing rooms, kitchen, alleviator, evacuation stairs, boiler.

47. Implementation of this project will help improve the livability of the Rukhi urban area through improved access to quality pre-school infrastructure, improved environment: new playgrounds increasing gross motor skills of children, safe building – considering fire alarm and safety systems, clean and updated sanitary infrastructure including water closet and kitchen, improved planning of the kindergarten building; increased space per child and per teacher; energy efficient kindergarten buildings; improvement of educational and working conditions for children and teachers in kindergarten; Improved access to inclusive child-friendly quality education.

48. The potential beneficiaries of the project will be about 200 families from V. Rukhi per year that will be able to accommodate their children in kindergarten.

Figure 17. Site location – Kindergarten in Rukhi

2.1.18. Construction of Kindergarten in Chitatskaro

49. The project covers construction of kindergarten in the village Chitatskaro is situated in Western Georgia and is 333 km away from Tbilisi via motor- road. The distance to Poti Sea Port is 63 km (Zugdidi Municipality). The project includes arranging of kindergarten for 4 groups – 100 children in Village Chitatskaro. The kindergarten building will include setting up of bedrooms, playing rooms, cloakrooms, canteen, storing rooms, hall, administration rooms, washing rooms, kitchen, alleviator, evacuation stairs, boiler (with the total area of 1,612.9 m2). The project also envisages arranging garden, benches, sheds, playgrounds, waste bins and water fountains on the rest of the area allocated by the Local Government (7,385.00 m2).

50. Implementation of this project will help improve the livability of the Chitatskaro urban area through improved access to quality pre-school infrastructure, improved environment: new playgrounds increasing gross motor skills of children, safe building - considering fire alarm and safety systems, clean and updated sanitary infrastructure including water closet and kitchen, improved planning of the kindergarten building; increased space per child and per teacher; energy efficient kindergarten buildings; improvement of educational and working conditions for children and teachers in kindergarten; Improved access to inclusive child-friendly quality education. The potential beneficiaries of the project will be about 200 families from V. Chitatskaro per year that will be able to accommodate their children in kindergarten.

Figure 18. Site location – Kindergarten in Chitatskaro

2.1.19. Construction of Kindergarten in Bandza

51. The project covers construction of kindergarten in V. Bandza (Martvili Municipality). Bandza is situated in Western Georgia and is 274 km away from Tbilisi via motor- road. The distance to Poti Sea Port is 63 km. Cadastral code of the land plot allocated is 41.04.35.339. Total area of the territory is 5,662.00 m2. The building is to be constructed on the area of 980.52 m2. The project includes arranging of kindergarten for 4 groups - 100 children. The kindergarten building will include setting up of bedrooms, playing rooms, cloakrooms, canteen, storing rooms, hall, administration rooms, washing rooms, kitchen, alleviator, evacuation stairs, boiler (with the total area of 1,612.9 m2). The project also envisages arranging garden, benches, sheds, playgrounds, waste bins and water fountains on the rest of the area allocated by the Local Government (5,662.00 m2).

52. Implementation of this project will help improve the livability of V. Bandza urban area through improved access to quality pre-school infrastructure, improved environment: new playgrounds increasing gross motor skills of children, safe building – considering fire alarm and safety systems, clean and updated sanitary infrastructure including water closet and

kitchen, improved planning of the kindergarten building; increased space per child and per teacher; energy efficient kindergarten buildings; improvement of educational and working conditions for children and teachers in kindergarten; Improved access to inclusive child-friendly quality education. The potential beneficiaries of the project will be about 200 families from Bandza per year that will be able to accommodate their children in kindergarten.

Figure 19. Site location – Kindergarten in Bandza

2.1.20. Construction of Kindergarten in Senaki

53. According to the project, the construction area of the new two-story kindergarten building in Senaki is 980.4 m2, the total construction area is 1344.6 m2. The project envisages setting up a kindergarten for 4 groups (100 children). Kindergarten building includes arrangement of bedrooms, playrooms, sitting rooms, dining room, storage rooms, hall and administrative rooms, bathrooms, kitchen, elevator, evacuation stairs and boiler rooms.

54. The project envisages improvement of the kindergarten yard, arrangement of amusement attractions, playgrounds, swings, patio chairs, skating rinks, garbage cans and drinking water fountains (so-called mushrooms). The project also includes the arrangement of engineering networks of the building: water supply and sewage, electricity, heating - cooling - ventilation, etc.

Figure 20. Site location – Kindergarten in Senaki

2.1.21. Construction of Kindergarten in Kutaisi

55. The construction site is located in Western Georgia, city of Kutaisi, Avtokarkhana district (c.c. 03.01.24.857.). The area selected for the project is free of buildings. The area under construction of the new garden building is 896.4 sq. m., and the total area is 8537 sq.m.

56. The facade of the building will be decided in a modern style and cheerful colors. The new two-story building will be located at the extreme north point of the project land plot, and the rest of the yard will be used to arrange entertainment grounds, attractions and a recreation area. The project envisages thermal insulation of the building, low emission glass package will be used, which will further reduce energy consumption and save budget. The new kindergarten will feature bedrooms and playrooms, dressing rooms, a buffet, a pantry, a hall, a storage room for products, a doctor, an administration, a dishwasher, a kitchen, an elevator, an evacuation ladder and a boiler room. The project envisages the improvement of the yard of the kindergarten, the arrangement of entertainment attractions, playgrounds, swings, yard chairs, skating rinks, garbage bins and drinking water fountains (so-called mushrooms). The project also includes the arrangement of engineering networks of the building: water supply and sewerage, electricity, weak system, heating-cooling-ventilation, etc.

Figure 21. Site location – Kindergarten in Kutaisi

2.1.22. Rehabilitation of the central Part of Velistsikhe Village

57. The project site is in the village of Velistsikhe, Gurjaani Municipality, Eastern Georgia. The village is one of the oldest and largest settlements in Kakheti. It is located on the major Khornabuji-Velistsikhe-Cheremi-Ujarma highway.

58. Velistsikhe village is situated on the plain of Alazani, on the bank of the Chermiskhevi River (see Figure 22).

59. The project aims to develop an attractive and organized environment for tourism development in the village of Velistsikhe. The rehabilitation project entails refurbishment of three main sites in the village: (1) the central street of Velistsikhe, (2) the Theatre and (3) the Park. While the former two are intended to be converted into a hospitality and retail hub, the latter will serve primarily as a recreational space for villagers. The theatre and park will be fully rehabilitated; on facades of the building and the walkways will be refurbished on the central street.

60. The total project area is 7.7 hectares, central street (including buildings and theatre) (4.3 ha) and central park (3.4 ha). Land plots will also be allocated for the construction of a bus station and parking (4611 m^2), and for the construction of wastewater treatment plants (two units with capacity 150 m^3/24 hour each, on an area of 589 m2).

Figure 22. Location of Velistsikhe Village

61. The development vision for the village is based on sustainability principles, which consider: (i) Conservation of historical authenticity of the area representing one of the main values for the village; and (ii) Responding to modern needs and challenges, meanwhile considering local traditional values.

62. The project includes the following components: (i) Reconstruction and rehabilitation of buildings located in the central part of the village (see Figure 23); (ii) Rehabilitation of the central street and square near the theatre; (iii) Rehabilitation of the facade and first floor of the theatre building (see Figure 24); (iv) Rehabilitation of the recreational park (see Figure 25); (v) Construction of a bus station; and (vi) Construction of a biological Wastewater Treatment Plants (see Figure 26).

63. The project design is elaborated within the framework of the “Village Velistsikhe Central Part Master Plan” approved by Gurjaani municipality in 2019. The Master Plan for Velistsikhe is focused on the improvement of the touristic environment, whilst considering location and cultural values. Velistsikhe is located next to the central highway connecting the Kakheti region with Tbilisi, the capital of Georgia, and to other regions of the country. The center of the village is attractive for tourists due to its urban structure, cultural heritage monuments, wine cellars and wine production activities.

Figure 23. Plan of the buildings to be rehabilitated within the project

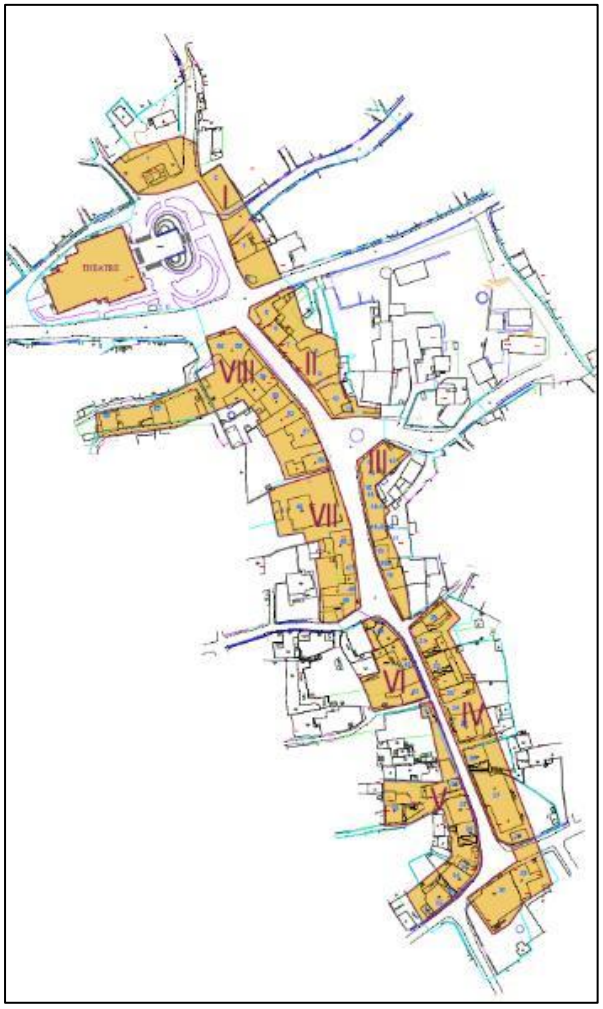


Figure 24. Location of Theater and Square to be rehabilitated

Figure 25. Location Recreational Park

Figure 26. Location of Bus Station, Parking and WWTPs

64. According to the Environmental Assessment Code of Georgia, the envisaged civil works do not require environmental screening or an Environmental Impact Assessment (EIA). However, as the project foresees the establishment of two WWTPs (with 150 m^3/24-hour capacity each), an environmental screening was conducted. According to the Order of the Ministry of Environment Protection and Agriculture #2-942, dated 20 October 2020, the construction and operation of WWTPs in Velistsikhe do not require a full EIA to be completed.

65. The Livable Cities Investment Program (LCIP), including the presented project, has been classified as Category B per ADB SPS. Thus, Initial Environmental Examination (IEE) was developed, including conducting baseline measurement, for the project and approved by the ADB.

66. The Draft and Final IEE was discussed with the stakeholders on 18, 26, 27, 30 November and on 1, 3 December of 2020 and 17, 18 19 January of 2022 and disclosed on the MDF's web-site in Georgian and English languages. In addition, the reports have been shared with the local Municipality and the CSC.

67. Since several buildings to be rehabilitated within the project (located at the central street of village Velistsike, cluster 2) are located within a visual security zone for the protection of cultural heritage monuments: St. George Church, the Virgin Church and the Church of Virgin Mary, the project design has been agreed with the National Agency for Cultural Heritage Preservation (NACHP) of Georgia, who has approved the works to be undertaken within the visual security zone of the cultural property. NACHP has reviewed the revised sketch design for rehabilitation works of residential houses in the vicinity of cultural heritage monuments. As a result, it was noted that the rehabilitation works of the residential houses in the center of Velistsikhe Village can be executed based on the documents submitted. NACHP has also reviewed the detailed design of rehabilitation of the central part of Velistsikhe village and provided the confirmation letter (dated 24.05.2021 N12/1745) on approval of the envisaged works with specific recommendations to be considered during the construction phase.

2.2. Projects' Contracts and Management

68. The Lender of the Project is ADB, Implementing Agency (IA) - Municipal Development Fund of Georgia; Construction Supervision Company (CSC) – Eptisa. The contracts about the construction works for each project of Kindergartens and Sport-complexes are given in the table 3.

69. The main institutions involved in IEEs/EMPs/SSEMPs implementation and monitoring, are the IA, the CSC, the Construction Contractors (CC) and to a lesser extent the Ministry of Environmental Protection and Agriculture and Municipal Authorities. IA (MDF) and CSC are responsible for ensuring monitoring of the project implementation at the construction stage. Ministry of Environmental Protection and Agriculture has the authority for periodic audits but should not be considered as a party responsible for monitoring according to the SSEMP. As it was mentioned above, MDF is responsible for general implementation of all safeguard's tasks. IA (MDF) and CSC (Eptisa) are responsible for ensuring monitoring of the project implementation at the construction stage, while the municipalities at the operation stage.

70. MDF ensures availability of all environmental information and facilitates environmental supervision of the project. The MDF's local environmental specialists responsibilities in respect of implementation of the IEE/SSEMP, are to: ensure that all relevant IEE/SSEMP requirements (including environmental designs and mitigation measures) are incorporated into the project bidding documents; Assist Contractors to obtain necessary permits and/or clearance, as required, from any relevant government agencies; Ensure that all necessary

regulatory clearances are obtained before commencing any civil work on the project; Ensure, that contractors have access to the EMP and IEE report and understand their responsibilities to mitigate environmental problems associated with their construction activities and facilitate training of their staff in implementation of the EMP; Approve the Site-Specific Environmental Management Plan (SEMP) prepared by the Contractor before he takes possession of construction site; Time-to time monitor the contractor's implementation of the SEMP in accordance with the environmental monitoring plan by conducting site monitoring visits.

71. The MDF through its Environmental Specialist, reports to the ADB in every 6 months on the status of environmental compliance of construction works by preparing semi-annual Environmental Monitoring Reports. In case unpredicted environmental impacts occur during the project implementation, prepares and implement as necessary an environmental emergency program in consultation with relevant government agencies and ADB.

72. The IA is being supported by a Construction Supervision Company (CSC) "Eptisa". The CSC is the IA's legal representative, and assumes the overall responsibility to professionally supervise the Contractors' activities and works – on behalf of the MDF. It ensures strict adherence of Contractors to the requirements of detailed designs, technical specifications, Environmental, Social and Gender Documentation and administers the construction contracts and ensure that the works are constructed in accordance with the provisions of the construction contracts. Construction Supervision Company is responsible for supervision of all environmental issues during project implementation. Along with ensuring consistency with the design and ensuring quality of works, the supervisor is mandated to track implementation of EMP/SSEMP by the Construction Contractor and reveal any deviations from the prescribed actions.

73. Environmental issues are managed by Supervision Company EPTISA responsible for: Reviewing and approval of environmental documentation, submitted by contractor; Monitoring of construction activities, issuing NCRs; Relationship with contractor and employer; Support of contractor in obtaining of environmental permits and licenses; Correspondence with Employer, contractor and local authorities. Environmental specialist of technical supervisor should assess how accurate is the factual information provided in the contractor's reports, fill any gaps identified in them, and evaluate adequacy of mitigation measures applied by contractor. Technical supervisor must highlight any cases of non-compliance with EMP/SSEMPs, inform on any acute issues brought up by contractor or revealed by supervisor himself, and propose corrective actions.

74. During implementation of construction activities CSC`s environmental specialist time to time conducts environmental meetings and site inspections. In case of observation of significant non- compliances CSC fills non-conformity report forms and sends them officially to Contractor. Most important issues, which cannot be managed by HSE department, are subject of review during weekly meetings. In case of emergency, contractor officially asks support of Employer, in the range of its competence, refers to relevant ministries and local authorities.

75. Thus, non-compliance notice has to be issued to the contractor if the CSC requires action to be taken. The contractor is required to prepare a corrective action plan which needs to be implemented by a date agreed with the SC. Non-compliance should be ranked according to the established criteria.

76. CSC company prepares monthly progress reports (using daily and weekly checklists), which cover the implementation of the SSEMP, discrepancies from the SSEMP and list all HSE relevant incidents and accidents that occur during the implementation; Submits periodic reports based on the monitoring data and laboratory analysis.

77. CC is obliged to follow EMP/SSEMP good construction practice during construction activities. In order to meet this obligation, Contractors have established environmental management teams and procedures.

78. Construction Contractors appointed a full time Health, Safety and Environmental Managers (HS&EM), which are a senior member of the construction management team based on site, for the duration of the contract. The construction contractor's Environmental teams responsible for implementation of EMP/SSEMP by daily environmental monitoring and reporting.

79. Key responsibilities of the environmental teams of the CC are preparation of the Site-Specific Environmental Management Plans (SEMP) for approval by the IA, prior to the Contractors taking possession of the construction site; Ensure that the SSEMP is implemented effectively throughout the construction period; Carry out the monitoring and mitigation measures set forth in the IEE/EMP/SSEMP; Establish an operational system for managing environmental impacts; Allocate the budget required to ensure that such measures are carried out. Construction contractors are responsible to prepare monthly progress reports on SSEMP implementation, which should contain information on the main types of activities carried out during the reporting period, status of any clearances/permits/licenses which are required for carrying out such activities, mitigation measures applied, and any environmental issues that have emerged in relations with suppliers, local authorities, affected communities, etc.

80. The CC submits reports of the carrying out of such measures to the employer on a monthly basis; establishing and maintaining site records of: Weekly site inspections using check-lists based on SEMP; Environmental accidents/incidents including resolution activities; Environmental monitoring data; Non-compliance notifications issued by the CSC; Corrective action plans issued to the CSC in response to non-compliance notices; Community relations activities including maintaining complaints register/complaints log-book; Monitoring reports; Routine reporting of SEMP compliance and community liaison activities; Ad hoc reporting to the Employer's Engineer of environmental incidents/spillages including actions taken to resolve issues.

81. Environmental and Health and Safety (EHS) Managers of the CC is responsible for the: Ensuring the developed plans are implemented effectively throughout the project cycle and all works are executed in compliance with applicable environmental/social/HS standards; Engaging in the process of grievance resolution and maintaining GRM log-book; Recording and photo-documentation of all work sites in the process of pre-construction and construction activities; Establishing and maintaining records of: (i) weekly site inspections using checklists based on SSEMP/ other plans and conducting instrumental environmental monitoring (if required); (ii) environmental accidents/incidents including resolution activities; (vii) Monitoring reports; (viii) Monthly reporting of SSEMP compliance and community liaison activities; (ix) implementation of the developed plans; Reporting monthly regarding the implementation of the prepared plans and results of Environmental, Social, HS inspections using SSEMP monitoring checklists; Reporting immediately to the CSC/IA if any serious environmental breach has occurred during construction; Undertaking permanent noise, vibration and emissions monitoring; Identifies all environmental impacts for each activity and if project variation is occurred; Obtaining all required environmental permits necessary for project implementation Ensuring relevant permits are in place for prior commencement of site specific activities; Coordinating Environmental information flow between Client and Suppliers/Sub-Contractors; Implementation of, and adherence to, all pre-construction, pollution prevention, waste management, water supply, aggregates, fauna and visual management requirements outlined in this plan; Implementation and supervision of the monitoring program; Record keeping and reporting on a daily basis to the Project Manager; Ensuring implementation of all monitoring activities and evaluates results; and ensuring any corrective or preventative action is implemented in good time; Keeping Project personnel

fully informed of all environmental concerns and issues; Develop other relevant plans and conduct relevant measurements/surveys in the process of project implementation; Close supervising of Sub-Contractors.

82. Information on environmental issues, arising from the construction activities should be immediately brought to the attention of MDF's safeguards team by the environmental specialists of construction and Supervision Companies', in order to coordinate efforts and ensure immediate mitigation of impacts, protect the environment and safeguard the health and welfare of the local communities.

83. Detailed information about the environmental staff for each project are given in the Table 3.

84. Construction Companies (CC) are required to engage a full time Environment, Health and Safety (EHS) Staff member that remain engaged until the completion of all works and ensure implementation of the safeguards documents in true letter and spirit.

2.2.1. Zugdidi Sport Complex, Akhaltsikhe Sport Complex

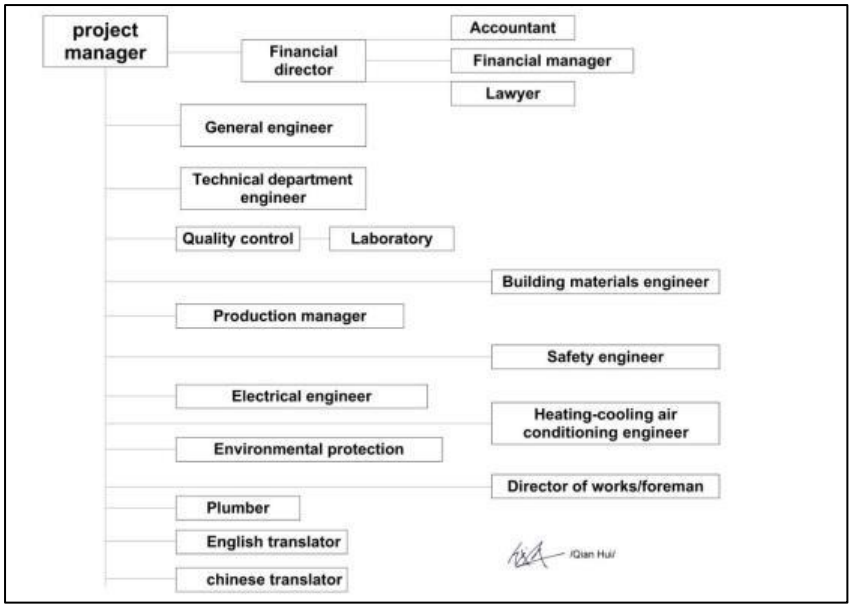
85. Construction Company – "Nantong Sanjian Georgia" has been selected for implementation of the projects Construction of Zugdidi Sport Complex and Construction of Akhaltsikhe Sport Complex. The contractor is responsible for following IEE/EMP and good construction practice. In order to meet this obligation, a contractor has established environmental management team and procedures and appointed a full time Environment and Social (ES) Manager (Ana Gelenava) and licensed Health and Safety (H&S) Manager (Ramaz Kashia) during the project implementation process. The mentioned officers will be based on site for the duration of the contract and develop monitoring reports, during the implementation of the project activities.

86. In accordance with the requirements of IEE/EMP, the contractor "Nantong Sanjian Georgia" prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities on 19.04.2021.

87. The contractor, in accordance with the IEE/EMP, conducted the following surveys noise and vibration, soil contamination, air pollution, field survey of flora and fauna species and based on the results, the following plans are developed along with the presented SSEMP: Traffic Management Plan, Noise and Vibration Management Plan, Waste Management plan, HS Management Plan and anti-COVID-19 measures, Emergency Response Plan, Camp Site Management Plan, Reinstatement Plan.

88. Full-time ES and HS Managers are engaged on-site who are qualified and have minimum certification per GEO laws, rules, and regulations. The staff will be remain engaged until the completion of all works and ensure implementation of the SSEMP(s), other required plans and other contractual provisions related to EHS.

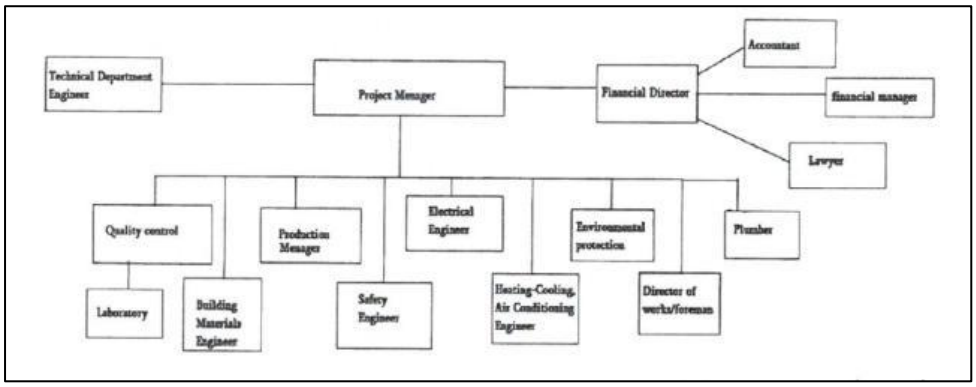
Figure 27. Organization Chart of Construction Company "Nantong Sanjian Georgia" LLC.



2.2.2. Kutaisi Swimming Pool

89. In accordance with the requirements of IEE/EMP, the contractor "Saba Construction" prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities on 19.04.2021.

Figure 28. Organization Chart of Construction Company "Saba Construction"



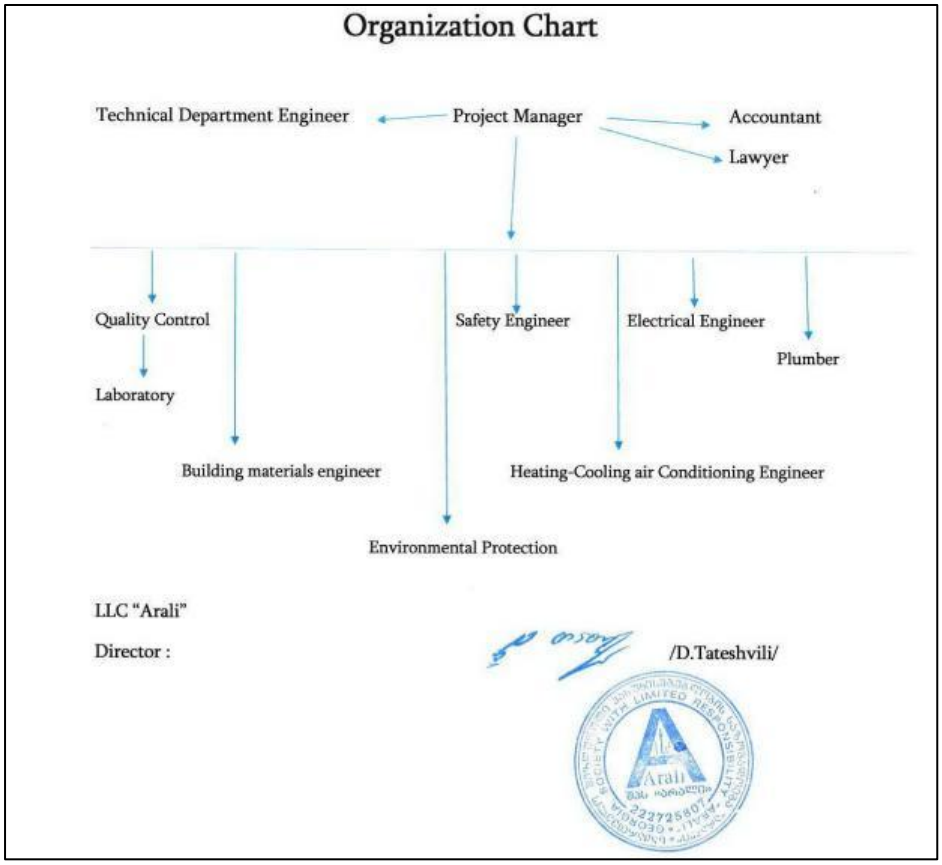
2.2.3. Rustavi Sport Complex

90. Construction Company – "Arali" LLC has been selected for implementation of the project Construction of Rustavi Sport Complex. The contractor is responsible for following IEE/EMP and good construction practice. In order to meet this obligation, a contractor has established Health, Safety, Environmental and Social (HSES) procedures and appointed a full time licensed Health, Safety, Environmental and Social (HSES) Manager (Iago Badagadze) during the project implementation process. The mentioned Manager will be based on site for the duration of the contract and develop monitoring reports, during the implementation of the project activities.

91. In accordance with the requirements of IEE/EMP, the contractor "Arali" LLC prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed

until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities on 20.04.21.

Figure 29. Organization Chart of Construction Company “Arali” LLC



2.2.4. Kindergarten in Dzveli Anaga (Signagi), Kindergarten in Kvemo Bodbe (Signagi), Kindergarten in Chiauri (Lagodekhi)

92. Construction Company– “Instali” LLC has been selected for implementation of the projects Construction of the Kindergarten in Dzveli Anaga (Signagi), Construction of the Kindergarten in Kvemo Bodbe (Signagi) and Construction of the Kindergarten in Chiauri (Lagodekhi). The contractor is responsible for following IEE/EMP and good construction practice. In order to meet this obligation, a contractor has established Health, Safety, Environmental and Social (HSES) procedures and appointed a full-time licensed Health, Safety, Environmental and Social (HSES) Manager during the project implementation process. The mentioned Manager will be based on site for the duration of the contract and develop monitoring reports, during the implementation of the project activities.

93. In accordance with the requirements of IEE/EMP, the contractor “Instali” LLC prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities.

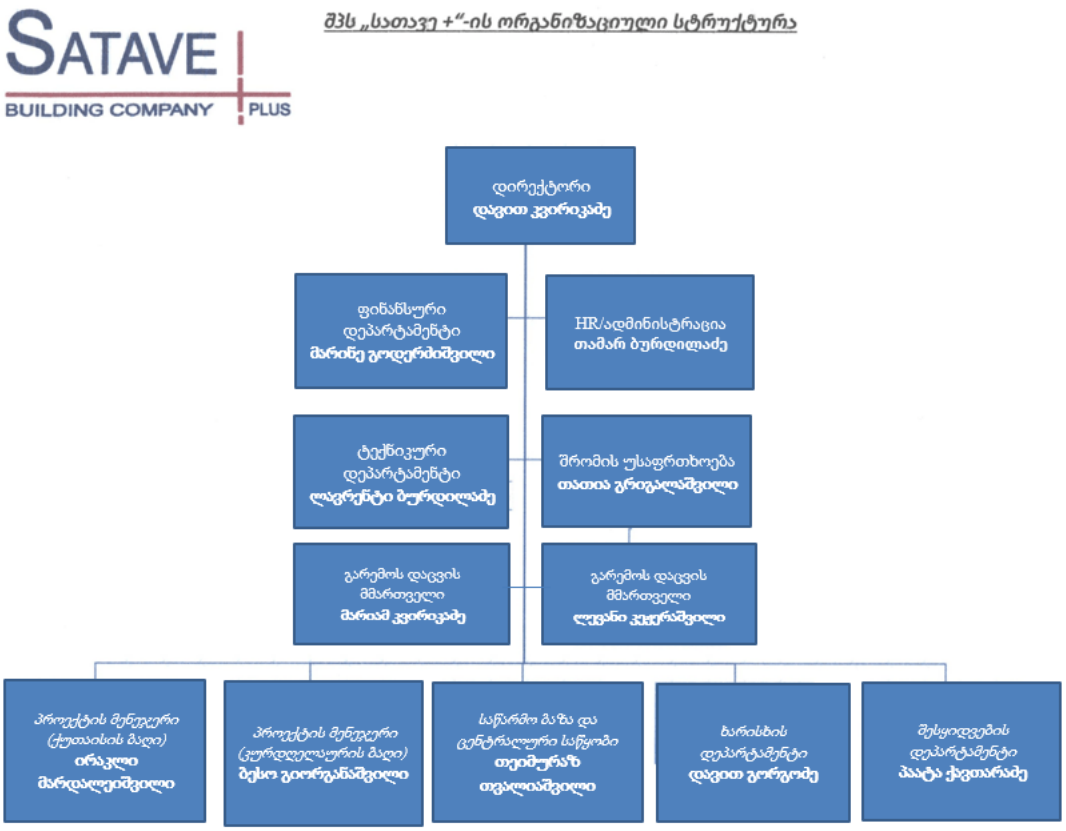
Figure 30. Organization Chart of Construction Company “Instali” LLC.

2.2.5. Kindergarten in Kutaisi, Kindergarten in Kurdghelauri (Telavi)

94. Construction Company – “Satave Plus” has been selected for implementation of the projects Construction of Kindergarten in Kurdghelauri (Telavi) and Construction of Kindergarten in Kutaisi. The contractor is responsible for following IEE/EMP and good construction practice. In order to meet this obligation, a contractor has established Health, Safety, Environmental and Social (HSES) procedures and appointed a full time licensed Health, Safety, Environmental and Social (HSES) Manager (Levani Kezherashvili, Mariam Kvirikadze and Tatia Grigalashvili) during the project implementation process. The mentioned Manager will be based on site for the duration of the contract and develop monitoring reports, during the implementation of the project activities.

95. In accordance with the requirements of IEE/EMP, the contractor “Satave Plus” prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities.

Figure 31. Organization Chart of Construction Company “Satave Plus”



2.2.6. Kindergarten in Chabukiani, Kindergarten in Chitatskaro, Kindergarten in Rukhi, Kindergarten in Bandza

96. In accordance with the requirements of IEE/EMP, the contractor “Abeka” prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities.

97. The contractor, in accordance with the IEE/EMP, conducted the following surveys noise and vibration, soil contamination, air pollution, field survey of flora and fauna species and based on the results, the following plans are developed along with the presented SSEMP: Traffic Management Plan, Noise and Vibration Management Plan, Waste Management plan, HS Management Plan and anti-COVID-19 measures, Emergency Response Plan, Camp Site Management Plan, Reinstatement Plan.

98. Full-time HSES Manager is engaged on-site who are qualified and have minimum certification per GEO laws, rules, and regulations. The staff will be remain engaged until the completion of all works and ensure implementation of the SSEMP(s), other required plans and other contractual provisions related to HSES.

Figure 32. Organization Chart of Construction Company “Abeka”

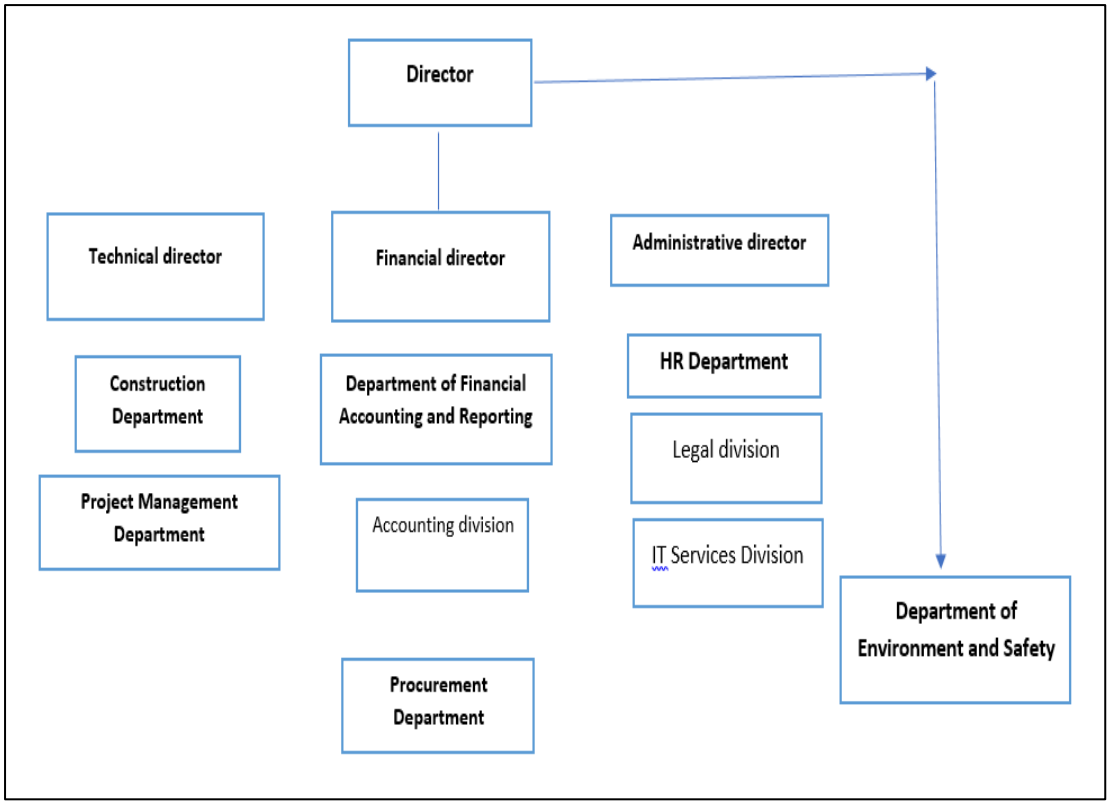
2.2.7. Kindergarten in Vardisubani, Kindergarten in Tsintskaro, Kindergarten in Shamgona

99. Construction Company – “Produce Investment” LLC has been selected for implementation of the projects Construction of Kindergarten in Vardisubani (Telavi), Construction of Kindergarten in Tsintskaro (Tetritskaro) and Construction of Kindergarten in Shamgona.

100. Company has already implemented Environmental Management and Occupational Safety Policy and procedures, which will apply to village Tsintskaro kindergartenn construction process to ensure that the project is implemented according to Environmental and Occupational Safety standards. For carrying out environmental and occupational safety policy and procedures, the company has appointed Safety and Environmental managers which will be involved in each stage of project implementation among them will ensure monitoring of fulfillment of IEE and SSEHSMP terms and reporting to the client as envisaged in the contract.

101. LTD “Produce Investment” team has prepared the Site Specific Environmental, Health and Safety Management Plan (SSEHSMP) which was submitted for approval to the Municipal Development Fund and the commencement of construction works will be possible only after the Municipal Development Fund approves the present document and issues approval on the commencement of the works.

Figure 33. Organization Chart of Construction Company “Produce Investment”



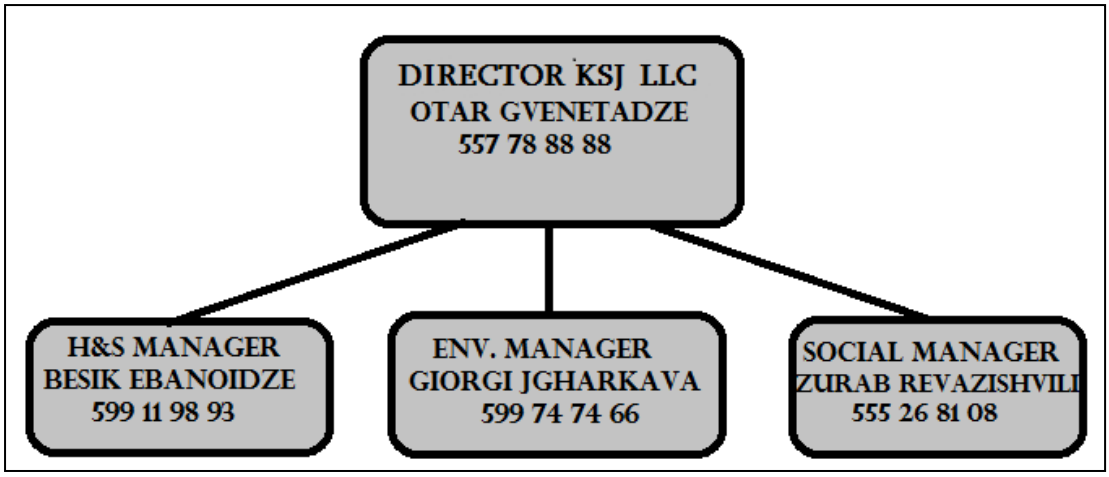
2.2.8. Kindergarten in Didichkoni, Kindergarten in Supsa, Kindergarten in Khajalia

102. In accordance with the requirements of IEE/EMP, the contractor "Georgian Construction Group" LLC prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities.

103. The contractor, in accordance with the IEE/EMP, conducted the following surveys noise and vibration, soil contamination, air pollution, field survey of flora and fauna species and based on the results, the following plans are developed along with the presented SSEMP: Traffic Management Plan, Noise and Vibration Management Plan, Waste Management plan, HS Management Plan and anti-COVID-19 measures, Emergency Response Plan, Camp Site Management Plan, Reinstatement Plan.

104. Full-time HSES Managers engaged on-site who are qualified and have minimum certification per GEO laws, rules, and regulations. The staff will be remain engaged until the completion of all works and ensure implementation of the SSEMP(s), other required plans and other contractual provisions related to HSES.

Figure 34. Organization Chart of Construction Company "Georgian Construction Group"



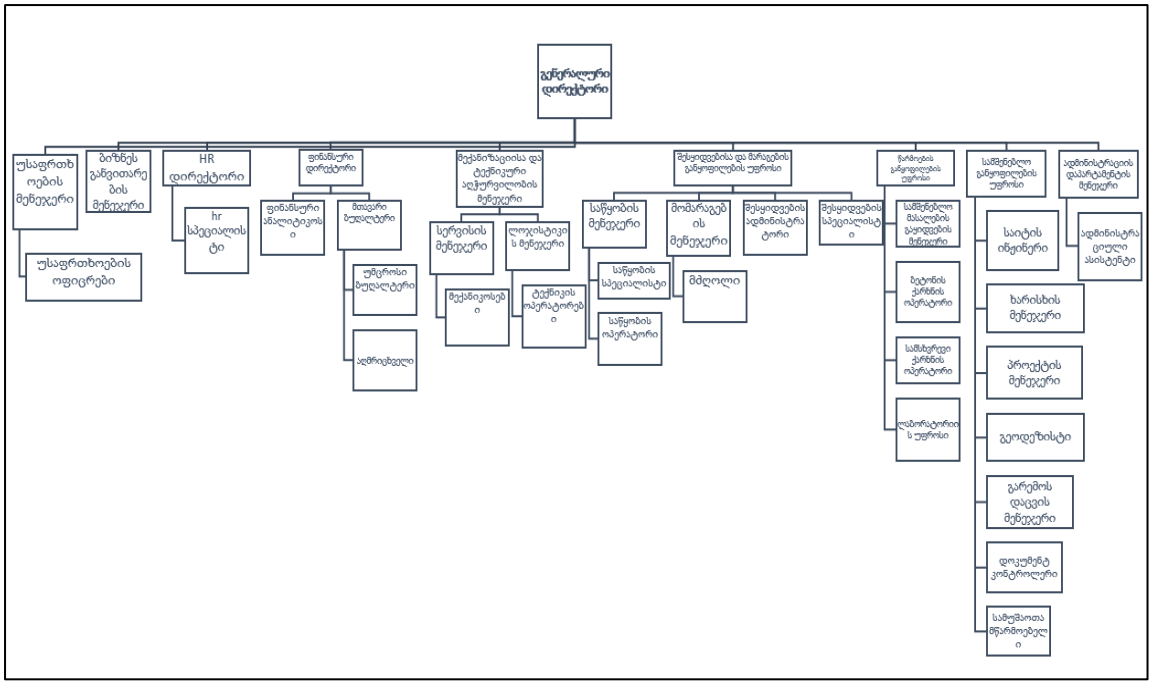
2.2.9. Kindergarten in Poti, Kindergarten in Senaki

105. In accordance with the requirements of IEE/EMP, the contractor “Prime Beton” prepared Site-Specific Environmental Management Plan (SSEMP) based on detailed engineering design and assessment of environmental conditions. It should be noted, that no works is allowed until the MDF – project-implementing agency (IA) has reviewed and issued a clearance to proceed the construction activities.

106. The contractor, in accordance with the IEE/EMP, conducted the following surveys noise and vibration, soil contamination, air pollution, field survey of flora and fauna species and based on the results, the following plans are developed along with the presented SSEMP: Traffic Management Plan, Noise and Vibration Management Plan, Waste Management plan, HS Management Plan and anti-COVID-19 measures, Emergency Response Plan, Camp Site Management Plan, Reinstatement Plan.

107. Full-time HSES Manager is engaged on-site who are qualified and have minimum certification per GEO laws, rules, and regulations. The staff will be remain engaged until the completion of all works and ensure implementation of the SSEMP(s), other required plans and other contractual provisions related to HSES.

Figure 35. Organization Chart of Construction Company “Prime Beton”



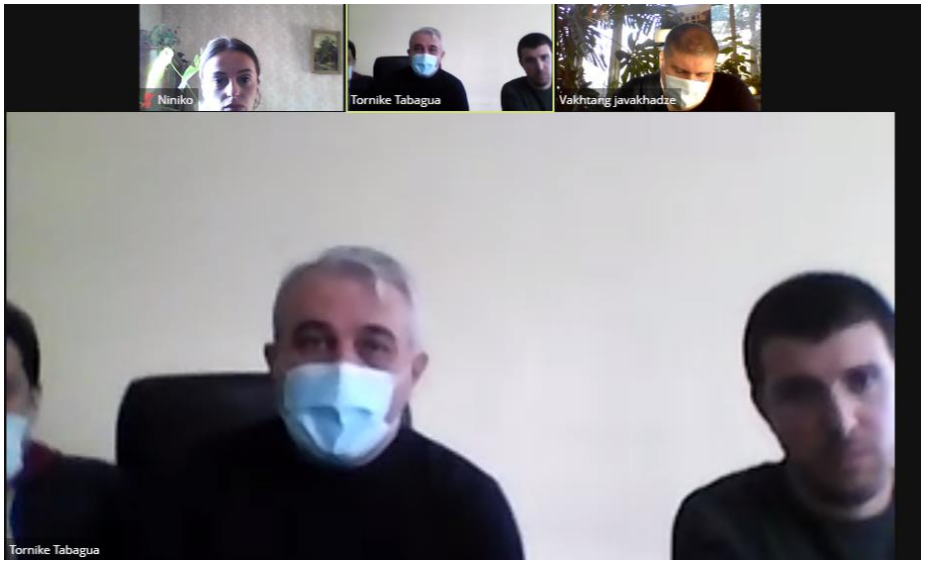
2.2.10. Rehabilitation of the central Part of Velistikhe Village

108. Under the project, the contract (N: LCIP/CW/015-2020) was signed between the MDF and Joint Venture of INSI LLC and JAVA LLC on 23th of December, 2021. The Construction Company (CC) was entitled to commence the civil works on site on 24th of January, 2022.

109. The IEE developed for the project forms an integral part of the contract, and thus, the CC is responsible for implementing all the requirements envisaged by the report.

110. Prior signing of the contract, an informational meeting aiming to make contractor familiar with the safeguards requirements was conducted (see Figure 36).

Figure 36. Informational Meeting with the CC

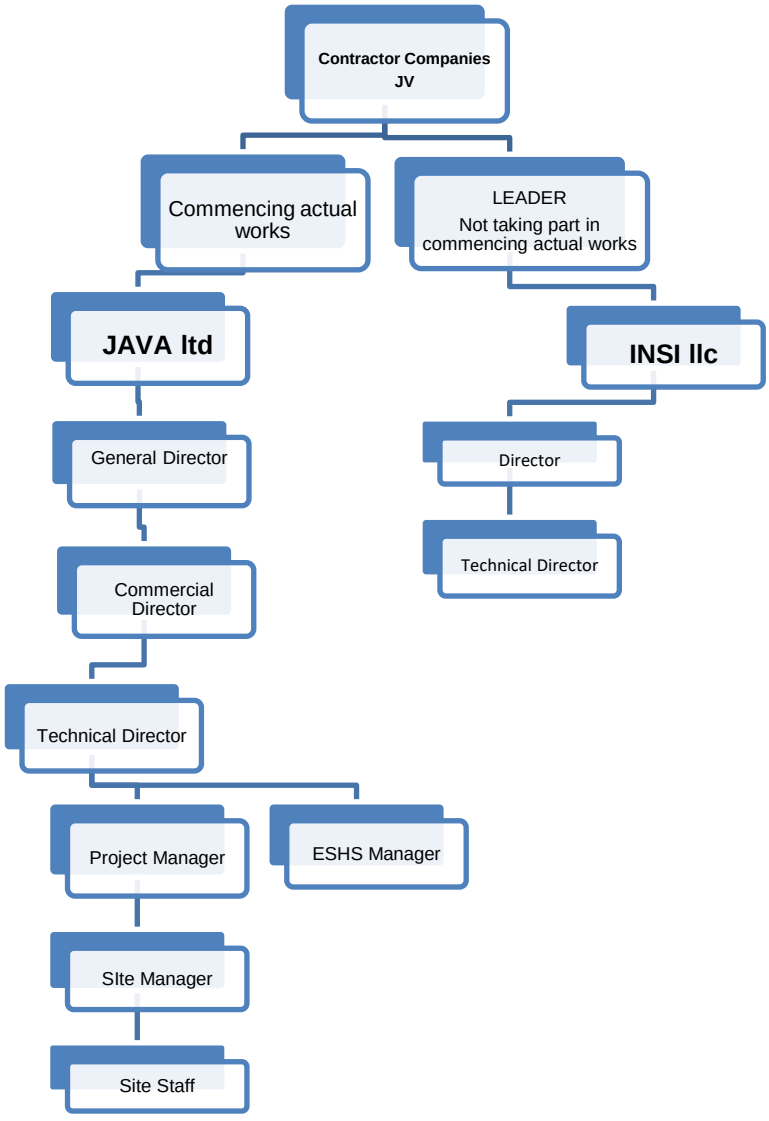


111. In accordance with the requirements of IEE/EMP, the contractor in Joint Venture (JV) “Java” and “Insi” LTD prepared Site-Specific Environmental Management Plan (SSEMP) and its

sub-plans and submitted to the IA. The MDF reviewed and issued a clearance to proceed the construction activities on the 24th of January, 2022.

112. In accordance with requirement of the IEE, the CC has appointed Environmental, Health and Safety (EHS) Staff for the duration of the contract (see Table 2 and Figure 37). Key responsibilities of the staff are as follows, but not limited to: ensuring the SSEMP (along with the other plans) is implemented effectively throughout the construction period and all works are executed in compliance with applicable environmental/social/HS standards, engaging in the process of grievance resolution, establishing and maintaining site records, reporting to the IA and CSC environmental incidents/spillages including actions taken to resolve issues, reporting monthly regarding the implementation of the prepared plans, undertaking regular instrumental measurement and etc.

Figure 37. Organization Chart of Construction Company



113. MDF is an IA, responsible for the day-to-day management of the project including implementation of all safeguards tasks and guarantee that potential adverse environmental impacts arising from the Projects are minimized by implementing mitigation measures Management of safeguard issues is carried out by MDF through Environmental and Resettlement Unit.

114. The IA has been supported by a Construction Supervision Company (CSC) “Eptisa” since 31 May of 2022 under the presented Project. The CSC is the IA’s legal representative, and assumes the overall responsibility to professionally supervise the Contractors’ activities and works – on behalf of the MDF. EHS staff (see Table 2) has been designated to ensure strict adherence of the CC to the requirements of detailed designs, technical specifications, environmental, social and gender documentation and administer the construction contracts and ensure that the works are constructed in accordance with the provisions of the construction contracts and the legislation of Georgia and ADB Safeguards Policy Statement 2009.

115. A detailed list of environmental staff of the CC, CSC and IA under the Project is given in the Table 2.

Table 2. List of Environmental and Health and Safety staff designated for the Velistsikhe Project

Organization	**Full Name**	**Position**	**Contact Information**
Implementing Agency - MDF	Niniko Isakadze	Environmental Specialist	Phone: 995 593 62 45 67 Email: nisakadze@mdf.org.ge
	Giorgi Mchedlidze	Health and Safety Specialist	Phone: 995 598 981023 Email: gmchedlidze@mdf.org.ge
Construction Supervision Company -Eptisa	Sopho Berishvili	Key Environmental Specialist	Phone: 995 599 27 00 49 Email: sophiko1@hotmail.com
	Maia Vashakidze	Non-key Environmental Specialist	Phone: 995 593 32 30 77 Email: Maya_vashakidze@yahoo.co.uk
	Giorgi Beradze	Health and Safety Specialist	Phone: 995 574 09 55 22 Email: G.beradze@gergili.ge
Construction Company in Joint Venture “Java” and “INSI” LTD	Magda Kirtadze	Environmental Specialist	Phone: 995 593 75 11 98 Email: m.kirtadze@javaltd.ge
	Tamaz Javakhishvili	Health and Safety Specialist	Phone: 995 574 19 19 60 Email: tazo.javakhishvili@gmail.com

Table 3. List of environmental staff of organizations for Sport complexes and Kindergartens

Organization	Name	Position	Phone	E-mail
Lender - ADB	Ninette Pajarillaga	Senior Environment Specialist Portfolio, Results, Safeguard, and Gender Unit	-	ndjenchuraev@adb.org
	Nino Nadashvili	Associate Safeguard Officer ADB GRM	995 577 44 09 90	nnadashvili@adb.org
	Giorgi Kobaladze	Environmental Consultant	995 599 68 98 34	Gkobaladze.consultant@adb.org
Borrower - MDF	Ketevan Papashvili	Environmental specialist	995599149 696	kpapashvili@mdf.org.ge
	Giorgi Mchedlidze	HS Specialist	598 981 023	gmchedlidze@mdf.org.ge
CC-Nantong Sanjian Georgia" LLC.	Ana Gelenava	HSE Manager	577 402 207	Annagelenava@gmail.com
	Tata Kutidze	HSE Manager	557 003 088	tataqutidze@gmail.com
	Aleko Melikidze	Environmental Manager	598 49 54 50	aleko1melikidze@gmail.com
CC - "Saba Construction"	Niko Jashiashvili	HSE Manager	577 990 325	niko.jashiashvili@mail.ru
CC – "Arali" LLC	Levan Kobakhidze	HSE Manager	544 446 999	l.kobxa1980@gmail.com
	Giorgi Kurtanidze	HSE Manager	577 990 311	giorgikurtanidzemail@gmail.com
CC – "Satave Plus"	Mariam Kvirikadze	Environmental Manager	592 007 078	mariamkvirikadze1995@gmail.com
CC – "Instali" LLC	Beso Ebanoidze	Environmental Manager	599 119 893	bebanoidze@gmail.com
CC – "Abeka" LLC	Tamar Phureliani	HSE Manager	598 471 700	tamarifureliani@yahoo.com
CC - "Produce Investment" LLC	Tinatin Zhizhiashvili	Environmental Manager	577 380 113	tikozhizhiashvili@yahoo.com
CC – JV "Java" Insi LTD	Magda Kirtadze	Environmental Manager	593751198	m.kirtadze@javaltd.ge
CC – "Georgian Construction Group" LTD	Beso Ebanoidze	Environmental Manager	599 119 893	bebanoidze@gmail.com
CC - "Prime Beton" LTD	Tinatin Zhizhiashvili	Environmental Manager	577 380 113	tikozhizhiashvili@yahoo.com

2.3. Project Activities during Current Reporting Period

2.3.1. Construction of Zugdidi Sport Complex

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Construction of the slab and beams: Reinforcement and installation of formworks	80
Construction of monolithic columns: Reinforcement and installation of formworks	100
Laying of iso-blocks: Walls and partitions	60

Equipment on Site

116. There is a bending and cutting machines at the facility. In addition, two additional units of equipment have been purchased to speed up the work. The electrical systems on the machines are installed by a certified electrical engineer, in compliance with safety standards.

117. The construction site includes: electric saw, benzo saw, drill, perforator, welding machine, sound and vibration measuring device, thermometer, large and small angle grinder, welding machine.

118. Any car - equipment at the construction site has insurance.

Manpower on Site

119. The number of employees at the facility is 19 people

2.3.2. Construction of Kutaisi Swimming Pool

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Earthworks	85
Reinforced concrete and load-bearing elements of steel structures	73
Arrangement of walls and partitions	25
Roof arrangement	47
Arranging floors	5
Drainage works	10
Pump unit construction	50
Power inlet el. control unit on swimming pool site	78
Sewage and outer network construction works	40

Equipment on Site

- Excavator - 1
- Crane - 1
- Dump truck - 3
- Truck with lifting basket - 4

Manpower on Site

120. The number of employees at the facility is 28 people

2.3.3. Construction of Rustavi Sport Complex

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Earthworks	80
Structural details	70
Metal structures	30
Internal finishing	33
Internal wiring	42

Equipment on Site

- Crane - 2
- Concrete mixer - 3
- Excavator - 1
- Welding machine - 32
- Dump truck - 1
- Pneumatic tools

Manpower on Site

121. The number of employees at the facility is 67 people

2.3.4. Construction of Kindergarten in Dzveli Anaga

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Earthworks	80
Steel structures	10
Assembly of formworks	10
Concrete works	5

Equipment on Site

- Excavator
- Dump truck
- Compactor

Manpower on Site

122. The number of employees at the facility is 15 people.

2.3.5. Construction of Kindergarten in Kvemo Bodbe

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Earthworks	100

Steel structures	50
Assembly of formworks	50
Concrete works	40
Filling with soil between columns	100
Supply of ballast and compaction	100

Equipment on Site

- Excavator - 1
- Electrical saw - 2
- Vibrator - 2
- Rebar bending machine - 1
- Electrical panel - 1

Manpower on Site

123. The number of employees at the facility is 17 people.

2.3.6. Construction of Kindergarten in Chiauri

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Earthworks	80
Steel structures	25
Concrete works	25

Equipment on Site

- Excavator - 1
- Electrical saw - 2
- Vibrator - 2
- Rebar bending machine - 1
- Electrical panel - 1

Manpower on Site

124. The number of employees at the facility is 15 people.

2.3.7. Construction of Kindergarten in Kurdghelauri

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Filling of the pit with backfilling material and gravel	100
Reinforcement and concreting of the foundation for the boiler	100
Reinforcement and concreting of the foundation for the shade and playgrounds	100
Backfilling for playgrounds	50

Reinforcement and concreting of walls and columns in the technical floor	100

Equipment on Site

- Concrete pump - 1
- Dump truck - 2
- Excavator - 1
- Compactor - 1
- Bobcat - 1
- Rebard bending machine - 1

Manpower on Site.

125. The number of employees at the facility is 34 people.

2.3.8. Construction of Kindergarten in Kutaisi

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works / Excavation works	100
Reinforced concrete and load-bearing elements of steel structures	70
Arrangement of walls and partitions	50
Fencing	100

Equipment on Site

- Excavator - 1
- Dump truck - 1
- Tractor - 1
- Crane - 1

Manpower on Site

126. The number of employees at the facility is 13 people.

2.3.9. Construction of Kindergarten in Supsa

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works, earthworks, vertical planning	60
Pit excavation	100
Preparation of pillows with ballast material for the slab	100
Reinforcement and concreting of the foundation slab	100
Concreting of external walls of the slab and columns	100
Construction of reinforced concrete beams alongside the perimeter of the external wall	100
Supply, spreading and compaction of ballast inside the building perimeter	100

Reinforcement and concreting of columns	100

Equipment on Site

- Excavator - 1
- Dump truck - 2
- Compactor - 1
- Concrete pump - 2
- Bobcat - 1

Manpower on Site

127. The number of employees at the facility is 16 people.

2.3.10. Construction of Kindergarten in Khajalia

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works, earthworks, vertical planning	50
Pit excavation	100
Preparation of pillows with ballast material for the slab	100
Reinforcement and concreting of the foundation slab	100
Concreting of external walls of the slab and columns	100
Construction of reinforced concrete beams alongside the perimeter of the external wall	100
Reinforcement and concreting of the slab	100
Supply, spreading and compaction of ballast inside the building perimeter	100
Reinforcement and formwork installation	100

Equipment on Site

- Excavator - 1
- Dump truck - 2
- Compactor - 1
- Concrete pump - 1

Manpower on Site

128. The number of employees at the facility is 14 people.

2.3.11. Construction of Kindergarten in Didichkoni

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Demolishment of the old school building and disposal of the waste	100
Preliminary works, earthworks, vertical planning	90
Pit excavation	100
Preparation of pillows with ballast material for the slab	100

Reinforcement of the slab	100
Concrete bed preparation	100
Horizontal reinforcement of foundation walls and formwork installation	50

Equipment on Site

- Excavator - 1
- Bending machine - 1
- Water pump - 2

Manpower on Site

129. The number of employees at the facility is 17 people.

2.3.12. Construction of Kindergarten in Tsintskaro

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Reinforcement, concreting and waterproofing of the pad foundation	100
Reinforcement, concreting and waterproofing of the retaining wall	100
Formwork installation for the slab and beams	100

Equipment on Site

- Dump truck - 3
- Rebar bending machine - 1

Manpower on Site

130. The number of employees at the facility is 13 people.

2.3.13. Construction of Kindergarten in Vardisubani

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Concreting of the slab	100
Reinforcement and concreting of columns (1st floor)	100
Construction of the retaining wall for the main entrance and the ramp	100
Wall construction with blocks (perimeter 1st floor)	100
External wall construction with blocks (perimeter 1st floor)	100
Concreting of the main entrance (the stairs and the platform)	100
Steel roofing construction for the main entrance and the ramp; Reinforcement and concreting of beams and the slab	100
Concreting of the fence foundation	20
Construction of sewage connections: piping and wells (5 pcs)	70

Equipment on Site

- Concrete pump - 1
- Dump truck - 1

- Excavator - 1
- Compactor - 1
- Bobcat - 1

Manpower on Site

131. The number of employees at the facility is 44 people.

2.3.14. Construction of Kindergarten in Shamgona

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works, earthworks, vertical planning	100
Pit excavation	100
Preparation of pillows with ballast material for the slab	100
Reinforcement of the slab (workshop activity)	100
Reinforcement and concreting of columns inside the pit	100
Reinforcement of the foundation	20
Pit backfilling	100
Filling of the pit with ballast and compaction	100

Equipment on Site

- Excavator - 1
- Dump truck - 1
- Compactor - 1

Manpower on Site

132. The number of employees at the facility is 17 people.

2.3.15. Construction of Kindergarten in Chabukiani

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Reinforcement and formwork installation for the foundation	100
Reinforcement and formwork installation for the boiler building and elevator walls	100
Reinforcement and formwork installation for the stairs (the main entrance)	100
Fencing	10

Equipment on Site

- Dump truck - 2
- Excavator - 1
- Compactor - 1

Manpower on Site

133. The number of employees at the facility is 31 people.

2.3.16. Construction of Kindergarten in Bandza

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works, earthworks, vertical planning	80
Pit excavation	100
Preparation of pillows with ballast material for the slab	90
Reinforcement of the slab	60
Construction of the monolithic reinforced concrete slab (walls outside the perimeter of the foundations and walls of the elevator shaft)	40
Reinforcement of columns	7
Fencing	80

Equipment on Site

- Excavator - 1
- Dump truck - 1
- Rebar bending machine - 1
- Electrical generator - 1

Manpower on Site

134. The number of employees at the facility is 15 people.

2.3.17. Construction of Kindergarten in Chitatskari

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Preliminary works, earthworks, vertical planning	100
Pit excavation	100
Reinforcement and concreting of the foundation	100
Reinforcement and concreting of the boiler building	100
Concreting of the boiler foundation (middle part)	80
Reinforcement of columns (preliminary)	50
Concreting of platform walls	80

Equipment on Site

- Dump truck - 1
- Excavator - 1
- Compactor - 1

Manpower on Site

135. The number of employees at the facility is 16 people.

2.3.18. Construction of Kindergarten in Poti

136. Construction activities (site mobilization) have been started recently (July 2022), hence it is not included in this reporting period

2.3.19. Construction of Kindergarten in Senaki

137. Construction activities (site mobilization) have been started recently (July 2022), hence it is not included in this reporting period

2.3.20. Construction of Kindergarten in Rukhi

138. Construction activities (site mobilization) have been started recently (July 2022), hence it is not included in this reporting period

2.3.21. Construction of Akhaltsikhe Sport Complex

Construction activities and project progress during reporting period

Project Activities	Activities progress (%)
Relocation of existing pipes	100
Demolition works	100
Preliminary works	100
Construction reinforced concrete and steel structures	94
Walls and partitions	27

Equipment on Site

- Dump truck - 3
- Concrete mixer - 5
- Concrete pump
- Welding machine - 2

Manpower on Site

139. The number of employees at the facility is 32 people.

2.3.22. Rehabilitation of the central Part of Velistikhe

Construction activities and project progress during reporting period

140. Under the reporting period, civil works are ongoing on the several project sites simultaneously: a local administration office, a theater and its adjacent square, a recreational park, Wastewater Treatment Plants (WWTPS), Bus Station and buildings: #20, #21, #22, #23, #24, #25, #26, #27, #28, #29, #30 of Cluster A (4) and # 49 of Cluster B (7) (see Figure 38).

Progress of the Ongoing Civil Works

Activities	Progress
Local Administration Office	3,1 %
Theatre	9 %
WWTPS	6,5 %
Bus Station	15 %
Recreational Park	9,3 %

Building #20	3 %
Building #21	6,7 %
Building #22	2,2 %
Buildings #23-24	4,3 %
Buildings # 27-28	28,5 %
Building #29	22,5 %
Building #30	11,1 %
Building #49	10 %

Project Activities	**Activities progress (%)**
Dismantling the roof and removing the plaster from the façade	100
Dismantling and arrangement of construction elements (soil transportation, arrangement of sawn wood material on the roof)	100
Reinforcement concrete, construction and installation works of monolithic constructions, three-chamber aluminium windows and air duct arrangement	70
Excavation of the tunnel and arrangement of power cables in corrugated pipe	60
Drinking water pipeline, sewage network and canalization	50
Arrangement bottom of the monolithic reservoir and reinforcement of monolithic walls	30

Figure 38. Layout of Local Administration Building, Theatre and its adjacent square, Buildings of Clusters A (IV) and B (VII)

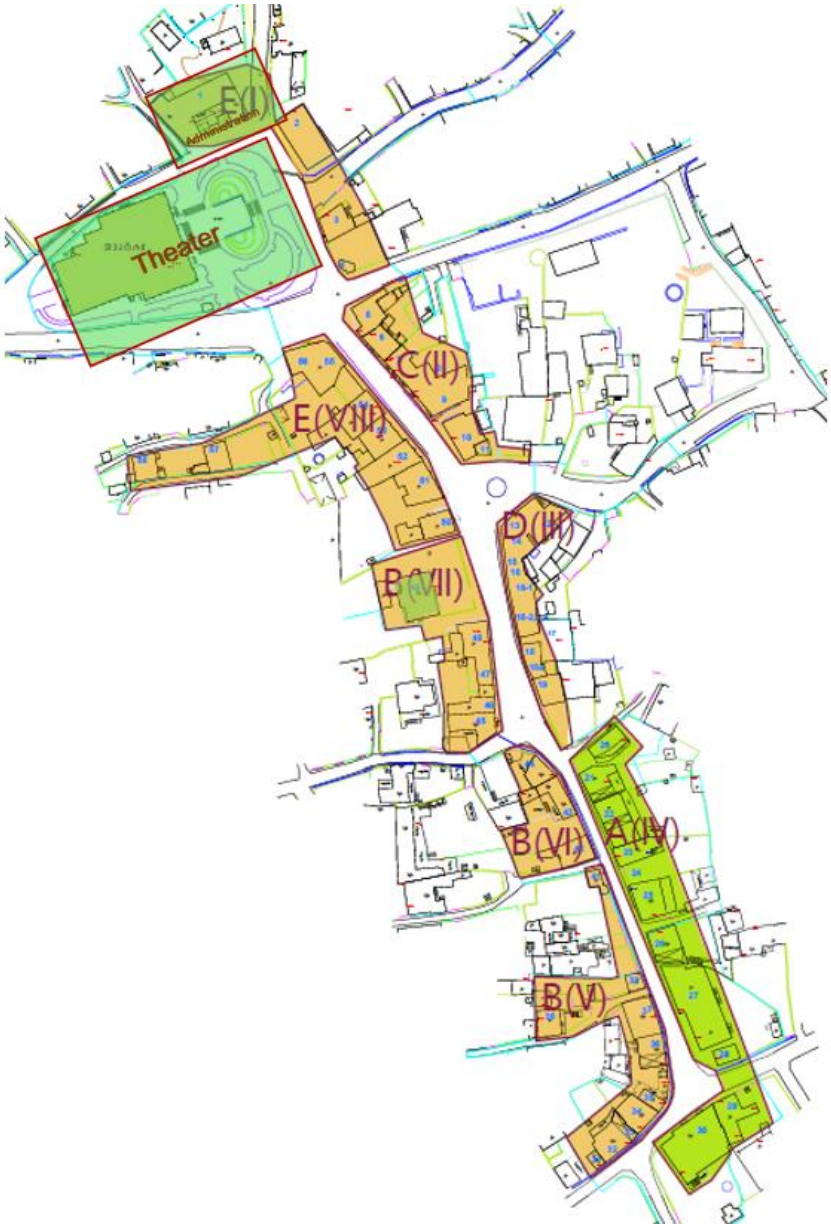


Figure 39. Recreational Park

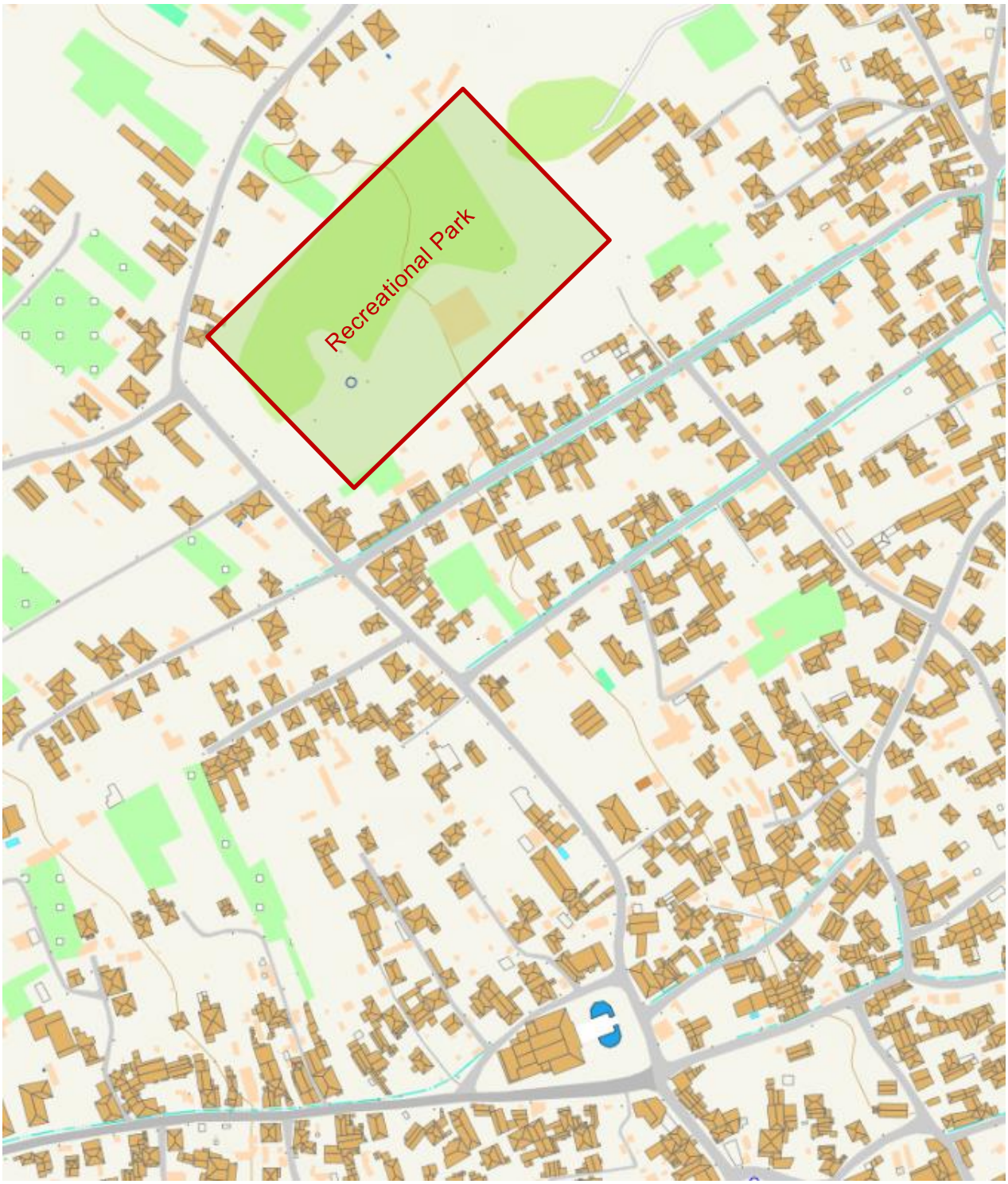


Figure 40. Location of WWTPs and Bus Station

Figure 41. Photo materials of the existing situation

	
WWTPs	***Recreational Park***

	
Building # 20	***Building # 23-24***
	
Building # 25	**Building # 29**
	
Building # 30	**Theater**

Equipment on Site

- Dump truck - 3
- Excavator - 1
- Compactor - 1
- Bobcat - 1

Manpower on Site

141. The number of employees at the facility is 26 people.

2.4. Description of Any Changes to Project Design

N/A

3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1. General Description of Environmental Safeguard Activities

Kindergartens and Sport Complexes

142. Site supervision and inspections, as well as monitoring of compliance of construction activities are important aspects to ensure the proper implementation of EMP/SSEMP requirements. Environmental management team of Construction and Supervisor Companies carry out permanent supervision activities and monitoring of the project performance on regular basis.

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143. Site supervision and inspections, as well as monitoring of compliance of construction activities are carried out in accordance with the requirements of IEE, including EMP, and the CC's SSEMP, pre-construction report, Asbestos Management Plan, Camp site Management Plan, Emergency Response Plan, Health and Safety Management Plan including COVID-19 measures, Noise and Vibration Management Plan, Traffic Management Plan, Waste Management Plan (approved by the Ministry of Environment Protection and Agriculture) and Top Soil Management Plan.

144. MDF with the support of CSC ensure the proper implementation of EMP/SSEMP requirements and carrying out permanent supervision activities and monitoring of the project performance on regular basis that includes, but not limited to construction site supervision, verification of permits, monitoring of compliance of the contractors' performance and specific monitoring of environmental impacts like noise, dust, soil contamination, landscape structure, construction waste, air emissions and etc.

145. The IEE developed for the project forms an integral part of the contract, and thus, the CC is responsible for implementing all the requirements envisaged by the report. In accordance with requirement of the IEE, the CC has appointed Environmental, Health and Safety (EHS) Staff for the duration of the contract.

146. The Construction Contractor's HSE (Magda Kirtadze and Tamaz Javakhishvili Managers are submitting environmental monitoring reports on a monthly basis and ensuring the SSEMP (along with the other plans) is implemented effectively throughout the construction period and all works are executed in compliance with applicable environmental/social/HS standards, engaging in the process of grievance resolution, establishing and maintaining site records, reporting to the IA and CSC environmental incidents/spillages including actions taken to resolve issues, reporting monthly regarding the implementation of the prepared plans, undertaking regular instrumental measurement, establishing and maintaining site records of:

- Site inspections during construction activities;
- Environmental accidents/incidents including resolution activities;
- Environmental monitoring data;
- Non-compliance notifications issued by the CSC;
- Corrective action plans issued to the CSC in response to non-compliance notices;
- Community relations activities including maintaining complaints register;
- Monitoring reports;
- Routine reporting of SSEMP compliance and community liaison activities;

147. As the CSC has been engaged in the project monitoring since 31 May of 2022, in order to ensure same level of understanding of the compliance requirements and issue instructions that CSCs and the CC be knowledgeable on the relevant provisions as specified the loan agreement, contracts, PAM, LARF, LARPs, EARF and IEE environmental management systems, record-keeping, monitoring, and reporting and what is to be done and how to rectify and address any environmental issues rose during project implementation process, a joint informational meeting with the environmental team of the CSC and the CC was organized and conducted by the MDF on June 24 of 2022. Moreover, introduction site monitoring was carried out by the teams of the MDF, the CSC and CC in Velistsikhe Village on 28 June and IA and CSC gave the CC the guidance and recommendations to undertake corrective actions in an acceptable manner.

148. MDF's Environmental Specialist has regularly been performing monitoring of ongoing activities with close cooperation with environment specialists of CSC and CC, by mailing, site monitoring visits and coordination meetings about twice a month.

3.2. Site Inspections/Audits

149. Regular inspection and monitoring of construction sites were conducted by CC, CSC environmental officers during the implementation of civil works under Kindergartens and Sport-Complexes.

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150. Inspection and monitoring of construction sites were carried out on a daily basis by the environmental specialist of the CC and non-key environment specialist of the CSC.

151. MDF's environmental specialist carried out monthly site monitoring and inspection in the reporting period and organized and conducted coordination meetings (30 May, 9 June, 17 June, 28 June and etc) with the environmental team of the CSC and CC in order to review and address findings and issues raised during the site visits.

152. The Asian Development Bank (ADB) fielded a Review Mission from 16–31 May 2022 for the LCIP. The Table 4 below represents the findings and understanding reached in the process of the Mission in Velistsikhe village and the actions undertaken by the MDF, CSC and CC.

Table 4. Findings and Understanding Reached in the process of the Mission in Velistsikhe Village

Topics of the Mission Findings	**Implemented Actions**
Concerns regarding the distance of the wastewater treatment plant to surrounding communities and potential impacts during operations including odor problems	The nearest residential house is approximately 170 m (direct distance) from the planned treatment plant, while the required distances between the facilities and settlements/sensitive receptors shall be at least 25 m. Moreover, in the process of developing the Detailed Engineering Design for the facility, the plants were selected taking its technological parameters into consideration to ensure that no odor is generated during the operation. The Treatment is carried out in stages and the WWTPs comprises of the following: a receiving-distributing chamber with dual air supply; the screen, which ensures removal of coarse

	admixtures; a three-stage reactor; a trickling filter with air circulation, where cellular plastic mass is incorporated and which operates with the settling. High level biological treatment is implemented using aerated tanks, placed alongside one another. In this case, each aero tank operates effectively with certain microorganisms and there is no conflict between them, as each group of microorganisms effectively operates within the framework of their own polluted liquid concentration and wastewater is processed stage by stage. In addition, the CC is responsible for planting 2-3 rows of trees around the WWTPs territory.
Potential loss of access during pipelaying works	Layout of the project sites superimposed on Google Earth map, and chainage-wise map of the sewer line showing existing facilities, properties, and photos within 20 meters of the road centerline where the pipe will be laid, was developed by the CC and reviewed by the CSC. The layout plan will be discussed with affected stakeholders in accordance with the Stakeholder Engagement Plan.
Disposal sites	The CC provided the disposal sites and the CSC has been assessing their potential impacts as requested by the Aide Memoire of the Mission.
Monitoring Checklists (Daily, Weekly, Monthly) of the CSC	The checklists are prepared according to the SSEMP and sub-plans and being used on a daily basis by the CSC.
Stakeholder Engagement	Stakeholder Engagement Plan (SEP) was prepared as requested by the Mission. On June 3, 4, 10 and 17 Public Consultations were conducted per the SEP with the affected households regarding construction works of sewage system and installation of Wastewater Treatment Plants (WWTPs) and informational brochures were distributed accordingly. regarding the main Environmental topics of the WWTPs.
SSEMP and sub-plans	SSEMP and sub-plans developed by the CC were submitted to the CSC, they are being updated and revised accordingly.

3.3. Issues Tracking (Based on Non-Conformance Notices)

153. General Non-compliances have been revealed during the reporting period:

- Construction site is not fenced from all sides
- Fuel and lubricants spill elimination items are not available at the construction area
- Trees at the construction site is not protected
- Construction waste is not removed completely
- Top soil is not stored properly
- Construction site is not arranged properly
- Hazardous Waste container is not installed
- Workers are not using complete Personal Protection Equipment (PPE)

3.4. Trends

154. During the current reporting period most of non–compliances were mitigated

3.5. Unanticipated Environmental Impacts or Risks

155. No any unanticipated environmental impacts and risks have been occurred during the reporting period. Any significant violations of HSE procedures have not been recorded during reporting period. Covid-19 health and safety management plan, emergency response plan have been prepared. No Covid-19 cases have been revealed during the reporting period among contractors' staff members.

4. RESULTS OF ENVIRONMENTAL MONITORING

4.1. Overview of Monitoring Conducted during Current Period

Sport-Complexes and Kindergartens

156. MDF requires the Construction Companies to implement construction activities in accordance with the environmental management plan, according to which SSEMP was developed.

157. Based on the EMP/SSEMP requirements, monitoring measures of projects includes construction site supervision, verification of permits, monitoring of compliance of the contractors' performance and specific monitoring of environmental impacts like noise, dust, soil contamination, landscape structure, construction waste, flora and fauna, water pollution, air emissions and etc. conducted by Contractor's environmental management specialists.

158. As in the reporting period, the following environmental measurements were performed:

- Conducted monitoring test for Vibration;
- Conducted monitoring test for Noise;
- Conducted monitoring test for Air quality;

Velistiskhe Urban Upgrade

159. MDF requires the Construction Companies to implement construction activities in accordance with the IEE, EARF legislation of Georgia, according to which SSEMP and sub-plans were developed.

160. In the Table 5 below there is a general overview of the monitoring conducted during the current reporting Period.

Table 5. General Non-compliances have been revealed during the reporting period

Trees at/nearby construction zone are not protected

Construction Waste removal violation

Construction works areas are not arranged properly

The waste treatment facility territory was not fenced and supervisory consultant together with MDF recommended to fence the territory

No gravel at the entrance of the territory; the medical waste disposal kits were not placed, no waste bins were allocated in the waste treatment facility territory.

The territory of the building #30 (musical school) requires more signs and housekeeping in some areas, also barriers should be put to separate from the neighbours. Contractor should put safety barriers from the street side once the construction activities are resumed

House # 20, 21- needs to be cleaned from construction material and asbestos remains.

Implemented Action: The ACM was removed from the area. The CC Engaged certified and competent asbestos service provider to transport the asbestos materials to the solid waste landfill, managed by the Ltd "Solid Waste Management Company of Georgia" in Telavi.

In order to adopting good practices and minimize the health risks associated with asbestos materials, workers were trained once again about removal, repair, and disposal of ACM and the necessity of using adequate personnel protection while handling asbestos, including respirators and disposable clothing.

Attention was paid to the tree at the entrance of the building # 49 as there was a risk of damaging roots of the tree.

Trees in the territory were not barriered with red tapes. Additional safety signs needed to be allocated. Also, there was no toilet on site that needs to be allocated.

161. In the reporting period, the following environmental measurements were performed (see Annex 3):

- Conducted monitoring test for Vibration;
- Conducted monitoring test for Noise;
- Conducted monitoring test for Air quality.

162. The Contract was signed between Java Ltd and Scientific Research Firm "**Gamma"** to conduct an environmental measurements of the area envisaged by the Rehabilitation Project of Central Part of Velistsikhe Village.

163. The instrumental measurements carried out in the survey area showed that:

- At both points, the values of pollutant concentration (CO, SO2, NO2, NO) measured in ambient air are within the allowable norm;
- At both points, atmospheric CO2 concentration is consistent with the reference data;
- At both points, the concentration of dust particles (PM2,5 and PM10) in the air is within the allowable norm;
- At both points, the average equivalent noise level obtained during a 12-hour continuous noise level measurement exceeds the maximum Sound Exposure Levels. This is due to the stated measuring points are located in the center of the village Velistsikhe, and it is busy with both traffic and movement of people, therefore the noise level exceeds was caused by the noted factors.

164. The CC provided the permit for tree cutting from the Gurjaani Municipality in accordance with requirement of the legislation of Georgia. None of the trees were included in the Red List species.

4.2. Trends

N/A

4.3. Summary of Monitoring Outcomes

165. Construction activities were supervised to ensure environmental compliance with the project requirements. Monitoring activities will continue the same way in the following reporting period.

4.5. Waste Management

166. Constructions works generate different type wastes: household, hazardous and construction waste.

167. Waste Management Plans are prepared by Constructing Companies.

168. The Construction Companies collect hazardous waste at the temporary storage sites and pass it to the licensed operators having environmental permit on operation of the hazardous wastes. Household waste is collected in special waste containers and periodically disposed by local Municipal Service on a contractual base. Hazardous waste area is well established with concrete ground, roofing.

169. Construction waste is accumulated on construction site in special isolated areas divided by hazardous, domestic and construction waste. Construction Company has signed contract with the companies for waste removal.

Velistsikhe Urban Upgrade Project

170. Constructions works generate different type wastes: household, hazardous (Asbestos-Containing Materials) and construction waste.

171. Waste Management Plan was prepared by the CC and approved by the Ministry of Environment Protection and Agriculture.

172. The CC also developed Asbestos-Containing Waste Management Plan being updated by the CSC.

173. The CC collect hazardous waste at the temporary storage sites and pass it to the licensed operator **"Eco Service Georgia" LTD** having environmental permit on operation of the hazardous wastes (see Annex 4).

174. The contracts were also signed between the CC and the Solid Waste Management Company of Georgia Ltd on disposal of hazardous and construction waste.

Figure 42.Removal of ACM

175. Household waste is collected in special waste containers and periodically disposed by local Municipal Service on a contractual base.

176. Hazardous waste area is well established with concrete ground, roofing in the construction camp.

177. Construction waste is accumulated on construction site in special isolated areas divided by hazardous, domestic and construction waste.

4.6. Health and Safety

178. Any significant violations of HSE procedures have not been recorded during reporting period.

4.6.1 Community Health and Safety

179. Any significant violations of community HSE procedures have not been recorded during reporting period. During the reporting period, in order to manage community health and safety, proper signs are installed.

4.7. Trainings

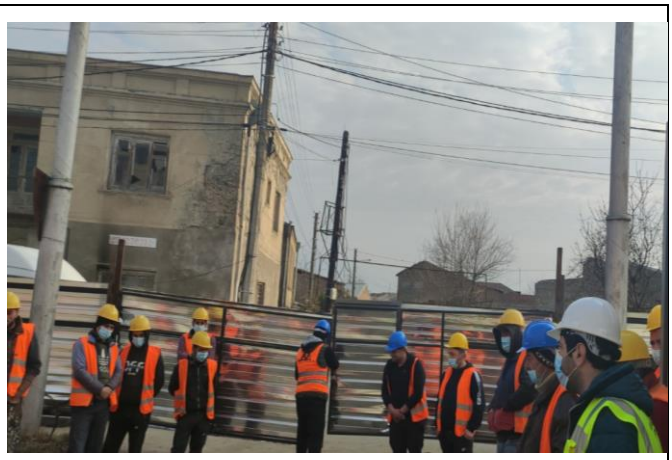
180. The Constructing Contractors carried out HSE trainings for the workers considering the safety measures and specifications of each work.

Velistsikhe Urban Upgrade Project

181. EHS trainings were provided for the CC personnel as appropriate and training records were maintained and reflected in the monthly reports. The personal were actively engaged in promoting understanding, and methods for, implementation of EHS requirements (see Figure 43).

182. Currently, EHS training plan is being developed for the activities envisaged by the Project by the CSC in coordination with the IA and so called refresher trainings are also planned to be carried out additionally.

Figure 43. Photo materials of trainings



5. FUNCTIONING OF THE SEMP

5.1. SEMP Review

Kindergartens and Sport-Complexes

183. Construction Contractors, as it was mentioned above, implement environmental monitoring of construction activities in accordance to SSEMP. Based on the EMP/SSEMP requirements, monitoring measures of project includes construction site supervision, verification of permits, monitoring of compliance of the contractors' performance and specific monitoring of environmental impacts like noise, dust, soil contamination, landscape structure, construction waste, flora and fauna, water pollution, air emissions and etc.

184. Contractor has the ability to fully implement the requirements set out under the SSEMP. Monitoring of SSEMP implementation is conducted by Contractor's, Supervision Consultant's and MDF's environmental management specialists.

185. Acting SSEMP is effective as along with project design change MDF ensured to update it as well and mitigation measures set out under the document are appropriate and working as intended. No other alternative better mitigation measures need to be set out, as existing ones are quite effective and comprehensive.

Velistsikhe Urban Upgrade Project

186. The CC has developed Site-Specific Environmental Management Plan and sub-plans: pre-construction report, Asbestos Management Plan, Camp site Management Plan, Emergency Response Plan, Health and Safety Management Plan including COVID-19 measures, Noise and Vibration Management Plan, Traffic Management Plan, Waste Management Plan (approved by the Ministry of Environment Protection and Agriculture) and Top Soil Management Plan. SSEMP was agreed with MDF on 24th of January.

187. Construction Contractors, as it was mentioned above, implement environmental monitoring of construction activities in accordance to SSEMP. Based on the EMP/SSEMP requirements, monitoring measures of project includes construction site supervision, verification of permits, monitoring of compliance of the contractors' performance and specific monitoring of environmental impacts like noise, dust, soil contamination, landscape structure, construction waste, flora and fauna, water pollution, air emissions and etc.

188. Contractor has the ability to fully implement the requirements set out under the SSEMP. Monitoring of SSEMP implementation is conducted by the CC, the CSC and the IA.

189. In the reporting period, as requested by the ADB, MDF and CSC has been reviewing and re-confirming applicability of the avoidance and mitigation measures envisaged by the SSEMP and the sub-plans.

6. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

6.1. Good Practice

Kindergartens and Sport-Complexes

190. Construction companies were given instruction to improve site HSE conditions in accordance with Non-Compliances to reach the better environmental conditions as per SSEMP requirements and establish bases for good performance practices for safer environment.

Velistsikhe Urban Upgrade Project

191. Coordination meetings with the safeguards team of the CSC, the CC and the MDF are carried out regularly. The project management team is fully engaged in order to understand what is to be done and how to rectify and address any environmental issues rose during project implementation process.

192. In the process of the project implementation, maintaining a shared work strategy, understanding cooperation of all internal and external stakeholders as an associated and participatory process in order to reduce the negative environmental impact caused by activities under the project.

193. Under the project, it is planned to remove Asbestos-Containing sewer pipes and roofing-materials. As on the one hand, these materials are hazardous waste and need special management and on the other hand, the project is being implemented in the urban and densely populated area, it's essential to adopt good management practices of Asbestos-Containing Materials (ACM) and ensure community-health and safety. Pursuant to this, increase awareness of the dangers of asbestos in a wide variety of affected communities is crucial. Prior removal of asbestos-containing pipes and roofing materials, informational campaign are conducted for the owners of the building and locals living adjacent to the project site in order to raise awareness of danger and risks associated with exposure to asbestos, the regulations provided by law in order not to create any uncertainty regarding the removal and proper storage and disposal of ACM from private properties. In addition, information brochures with detailed description of risks related to ACM are distributed to the population.

194. As the construction activities involve the use of heavy machineries and equipment to transport construction materials, workers, for the removal of debris from the work area. The operation of heavy machinery, vehicles and other construction equipment may result in exhaust emissions of carbon monoxide, NOx, SO2, hydrocarbons, and particulate matter, increase of noise and vibration level. Affected stakeholders are informed about the time and periods of intense transport operations and the activities that causes nuisance to affected people, before launch of such activities. Additionally, they are notified about the planned mitigation measures of the expected negative impacts.

195. Construction companies were given instruction to improve site HSE conditions in accordance with Non-Compliances to reach the better environmental conditions as per SSEMP requirements and establish bases for good performance practices for safer environment.

6.2. Opportunities for Improvement

196. It is important to start timely instrumental measurement of the noise, vibration and air quality parameters that will give significant benefit towards project environmental protection. Moreover, contractors have to prepare all environmental due documents and ensure its thorough implementation during construction works.

7. SUMMARY AND RECOMMENDATIONS

7.1. Summary

Kindergartens and Sport-Complexes

197. Construction Contractors carried out works according to the contract agreements and SSEMPs.

198. Construction Companies activities performed during the period is mainly satisfactory.

199. Site clearance - Construction companies has carried all necessary works related to HSE defined in the SSEMP.

200. Waste management- construction companies have prepared waste management plans. Construction companies mainly hold contract with Solid Waste Management Company for disposal of non-hazardous waste.

201. Noise, vibration, air - baseline measurements of the territory has been conducted during the SSEMPs preparation.

202. The supervision consultant undertakes environmental monitoring of the works regularly.

Velistsikhe Urban Upgrade

203. In accordance with requirement of the IEE, the CC has appointed Environmental, Health and Safety (EHS) Staff for the duration of the contract.

204. The CC carried out works according to the contract agreements and SSEMPs and developed monthly environmental monitoring reports.

205. The CC activities performed during the period is mainly satisfactory.

206. Site clearance - Construction companies has carried all necessary works related to HSE defined in the SSEMP.

207. The CC prepared waste management plan and approved by the Ministry of Environment Protection and Agriculture. The CC holds contract with Solid Waste Management Company for disposal of non-hazardous and hazardous waste. The CC also developed Asbestos-Containing Waste Management Plan being updated by the CSC.

208. The CC collect hazardous waste at the temporary storage sites and pass it to the licensed operator “Eco Service Georgia” LTD having environmental permit on operation of the hazardous wastes.

209. The CSC undertakes environmental monitoring of the works regularly.

7.2. Recommendations

210. Based of supervisory consultant monitoring, sites need better housekeeping. The materials on sites needs better segregation and adequate storage. Construction material waste should be removed timely from the construction site. The site should be cleaned regularly. Clean up of the spill stains at the site should be removed adequately.

211. Construction site should be fenced from all sides, warning signs should be installed.

212. Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed

213. Fuel/oil spill response items (sand, sawdust, deep trays, small size tank) should be always available at the construction sites.

214. Trees at the construction site should be protected to avoid its damage during construction works.

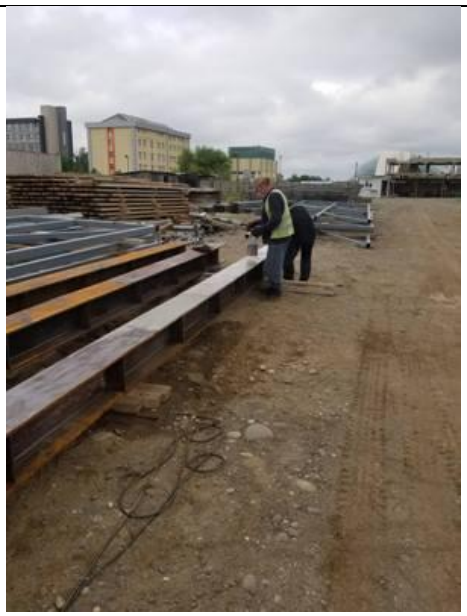
215. Hazardous Waste proper container with relevant signs “HAZARDOUS WASTE” should be installed at the proper organized place with concrete floor and roofing

216. Workers should be used complete Personal Protection Equipment (PPE)

ANNEXES

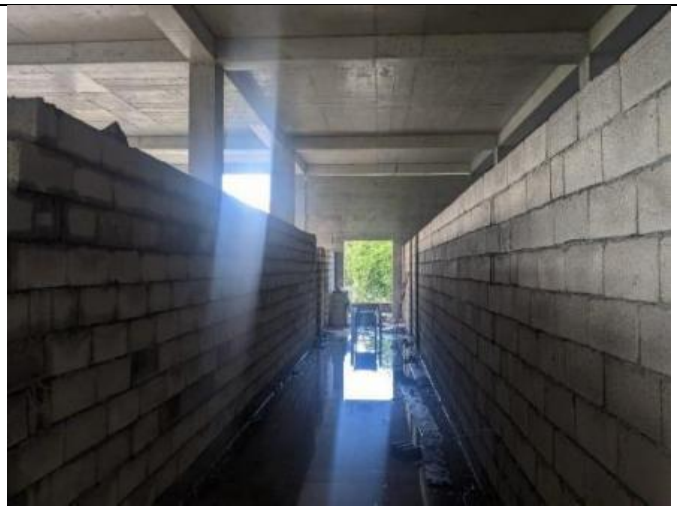
Annex 1. Photo materials of the ongoing Civil Works

Kutaisi Swimming Pool



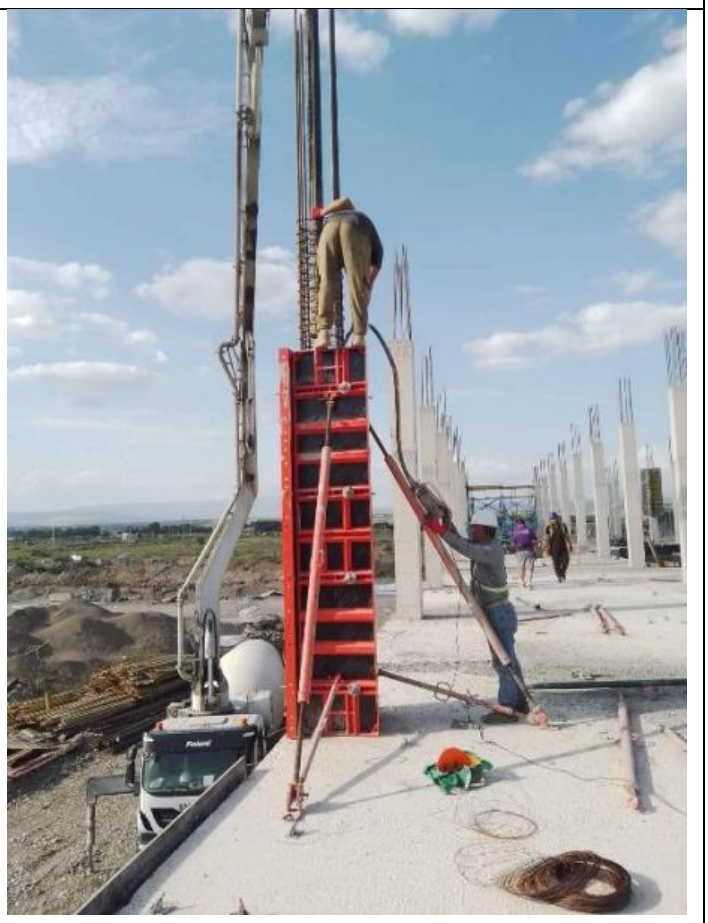
	

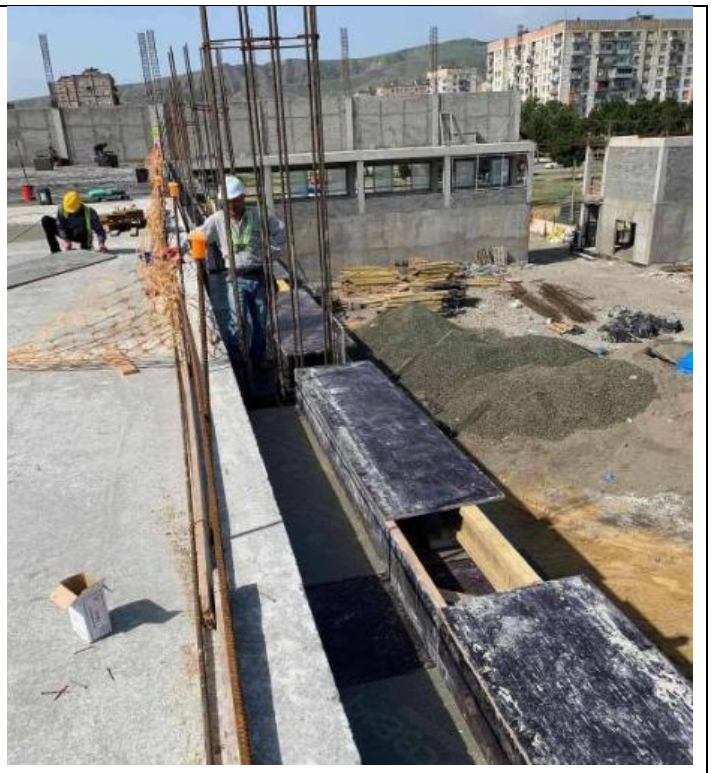
Akhaltsikhe Sports Complex

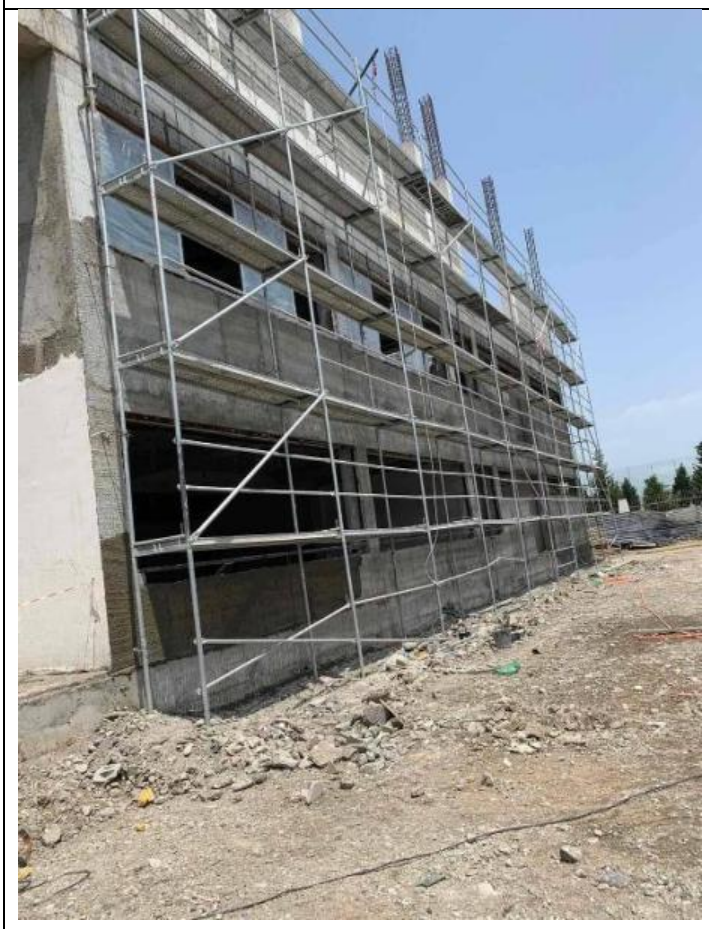


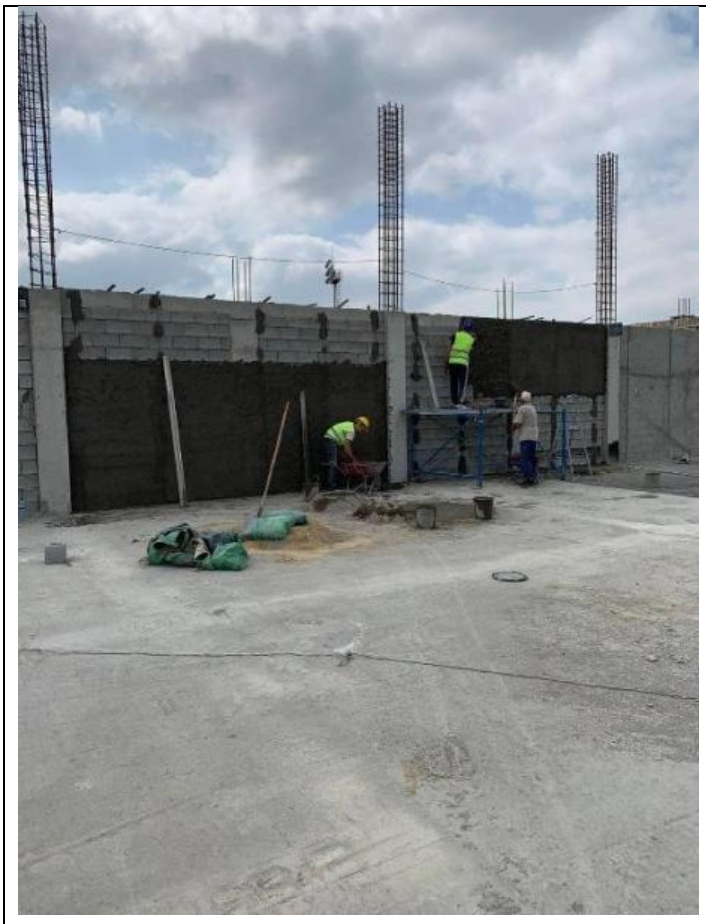
Zugdidi Sports Complex

Rustavi Sports Complex









Kutaisi Kindergarten

Kurdghelauri Kindergarten

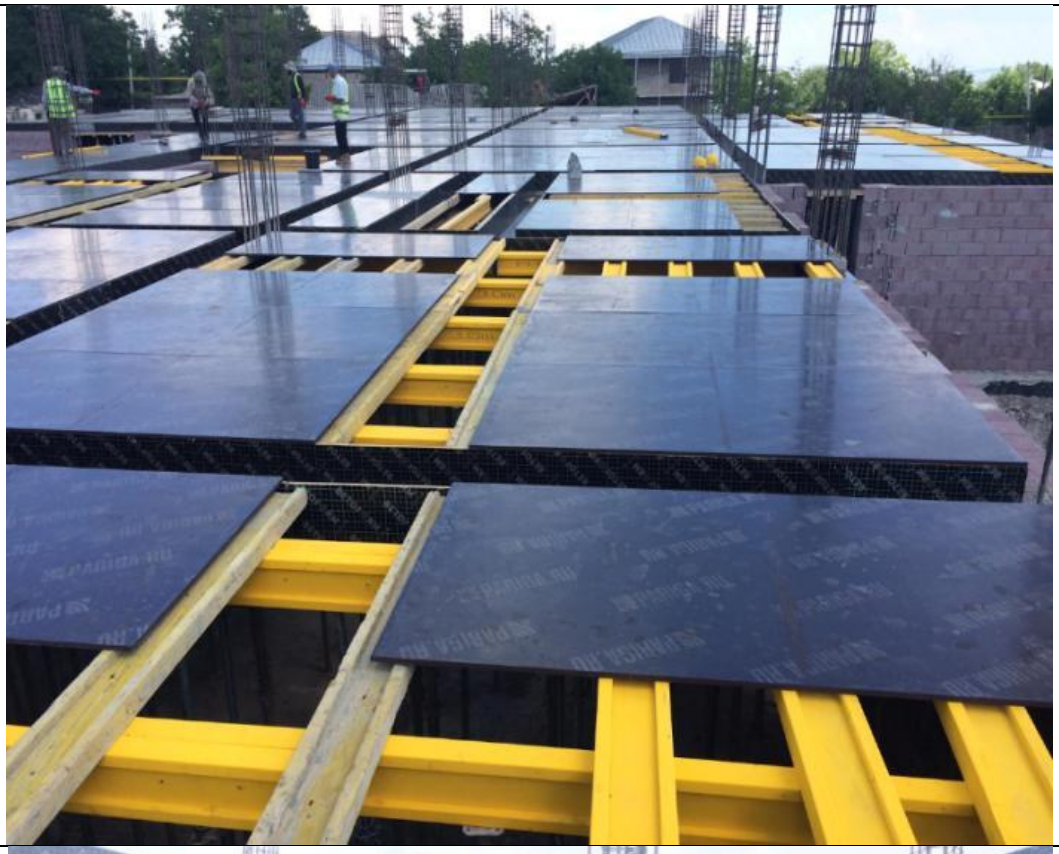
	

Supsa Kindergarten

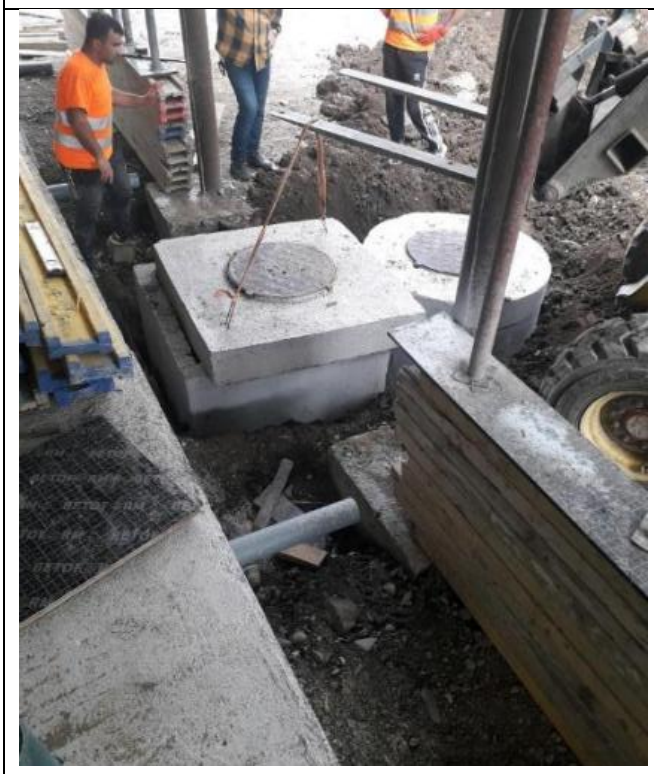
Khajalia Kindergarten

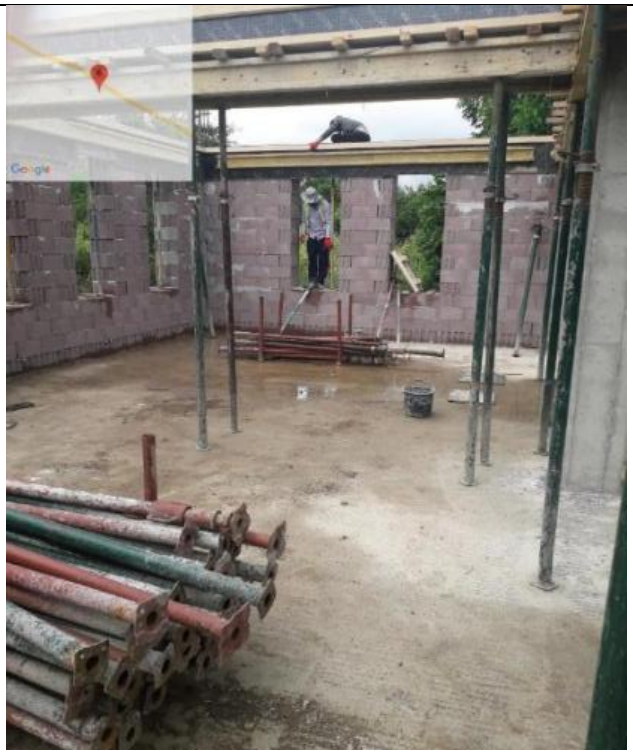
Didichkoni Kindergarten

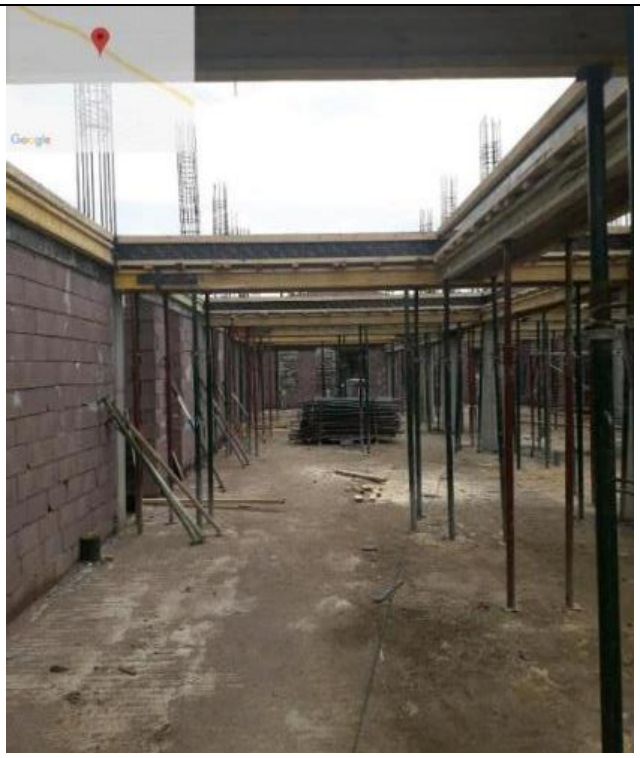
Tsintskaro Kindergarten



Vardisubani Kindergarten







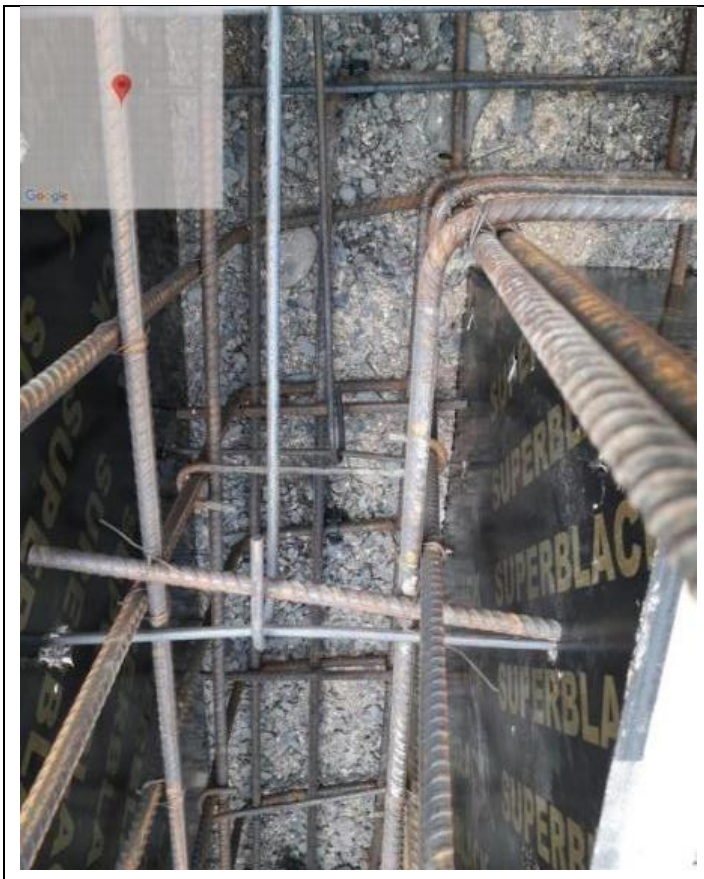
Shamgona Kindergarten

Dzveli Anaga Kindergarten

Kvemo Bodbe Kindergarten

Chiauri Kindergarten

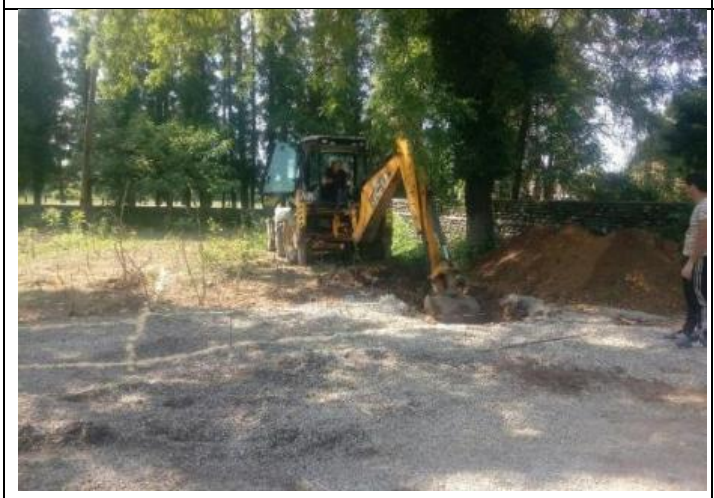
Chabukiani Kindergarten


SUPERBLA
SUPERBLA

Bandza Kindergarten

Chitatskari Kindergarten



Rehabilitation of the central Part of Velistikhe






Annex 2. Non-Compliance Notices

Non-Compliance Notice (14.04.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: LCIP/CW/01-2021	
Contractor: "Satave+" LLC	
Reference: Construction of Kindergarten in Kutaisi	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction related documentation is not submitted. Contractor should provide all environment related documents (agreements, permits etc.)
- Construction site is not fenced from all sides. Construction area should be fully fenced and equipped with lockable gate with warning and information signs at the entrance and perimeter
- Tree cutting without proper permit is prohibited. Before cutting of trees special inventory should be undertaken by the specialist. Tree cutting permit should be obtained either from local municipality or government of Georgia depending on tree species
- Top soil is not removed. Top soil of about 15-20 cm depth should be removed before excavation works and stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45^{o}) and signed
- Surplus waste soil is not removed. Bulks of the surplus waste soil should be removed from the construction site and disposed according to the agreements
- Waste containers (Hazardous and Household) are not installed. Proper containers with relevant signs "HOUSEHOLD WASTE"/ "HAZARDOUS WASTE" should be installed at the construction territory. Hazardous Waste container with should be installed at the proper organized place with concrete floor and roofing
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Construction site is not arranged properly. Site internally should be better arranged and cleaned regularly
- Construction territories should be lighted
- Complaint box is not installed. Proper box should be installed and signed
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)

Photos

	
All these conditions have to be remedied within seven days (by the 20.04.22) by the prime Contractor (Satave+" LLC)	
Date of site visits	13.04.2022
EPTISA – Environmental Specialist	

Non-Compliance Notice (14.04.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: LCIP/CW/04-2020	
Contractor: "JIANGSU NANTONG SAATJTATV CONSIRUCTION GROUP Co. LTD (China)"	
Reference: Construction of Sport Complex in Zugdidi	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction related documentation is not submitted. Contractor should provide all environment related documents (agreements, permits etc.)
- Trees at the construction site are not protected. All trees at the construction territory should be protected (fenced).
- Top soil is not removed. Top soil of about 15-20 cm depth should be removed before excavation works and stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45^{o}) and signed
- Construction/Demolition waste is not removed. Construction/Demolition waste should be removed completely and disposed according to the agreement
- Hazardous Waste container is not installed. Proper container with relevant signs "HAZARDOUS WASTE" should be installed at the proper organized place with concrete floor and roofing
- Waste should be placed only at the proper waste container
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Construction territories should be lighted
- Complaint box is not installed. Proper box should be installed and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)

Photos

All these conditions have to be remedied within seven days (by the 20.04.22) by the prime Contractor (“JIANGSU NANTONG SAATJTATV CONSIRUCTION GROUP Co. LTD (China)”)

Date of site visits	13.04.2022
EPTISA – Environmental Specialist	

Non-Compliance Notice (14.04.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: LCIP/CW/02-2020	
Contractor: "SABA Construction"	
Reference: Construction of the Olympic Swimming Pool in Kutaisi	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction related documentation is not submitted. Contractor should provide all environment related documents (agreements, permits etc.)
- Construction site is not fenced from all sides. Construction area should be fully fenced
- Surplus waste soil is not removed. Bulks of the surplus waste soil should be removed from the construction site and disposed according to the agreements
- Waste containers (Hazardous and Household) are not installed. Proper containers with relevant signs "HOUSEHOLD WASTE"/ "HAZARDOUS WASTE" should be installed at the construction territory. Hazardous Waste container with should be installed at the proper organized place with concrete floor and roofing
- Waste should be placed only at the proper waste container
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Tarpaulin cover during loose materials transportation is not used. Tarpaulins to cover loose material that is transported to and from the site by truck should be used
- Construction territories should be lighted
- Complaint box is not installed. Proper box should be installed and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)

Photos

All these conditions have to be remedied within seven days (by the 20.04.2022) by the prime Contractor (“SABA Construction”)

Date of site visits	13.04.2022
EPTISA – Environmental Specialist	

Non-Compliance Notice (19.04.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/06-2020*	
Contractor: Ltd Arali	
Reference: Construction of Sport Complex in Rustavi	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction site is not fenced from all sides. Construction sites should be properly fenced from all sides and equipped with lockable gate
- Complaint box is not installed. Proper box should be installed and signed (At entrance)
- Concrete washout pit is not arranged properly. Concrete washout pit should be arranged properly with Geo-membrane and signed “Concrete washout area/ბეტონის გამოსარეცხი ადგილი”
- Fuel and lubricant containers should be installed at the proper organized place with concrete floor and roofing. Existing antifreeze containers on the construction site also should be stored accordingly with appropriate marking.
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- At the construction territory are presented small spill spots of fuel and lubricant. These contaminated places should be remediated
- Top soil is not stored properly. Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)
- Scrap at the construction site should be collected separately at one location, fenced and signed (“Scrap”/”ჯართი“)

Photos














All these conditions have to be remedied within seven days (by the 26 April) by the prime Contractor (Ltd Arali)

Date of site visits	15.04.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (13.04.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/05-2020*	
Contractor: Nantong Sanjian Georgia LLC	
Reference: Construction of Sport Complex in Akhaltsikhe	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced).
- Hazardous Waste container is not installed. Proper container with relevant signs "HAZARDOUS WASTE"/"ს ა ხ ი ფ ა თ ო ნ ა რ ჩ ე ნ ე ბ ი " should be installed at the proper organized place with concrete floor and roofing
- Scrap at the construction site should be collected separately at one location, fenced and signed ("Scrap"/"ჯ ა რ თ ი ")
- Wooden waste at the construction site should be collected separately at one location, fenced and signed ("Wooden waste"/"ხ ი ს ნ ა რ ჩ ე ნ ე ბ ი ")
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Construction waste is not fully removed from construction area. Construction waste should be removed completely and disposed according agreement
- Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- At the construction territory are presented small spill spots of fuel and lubricant. These contaminated places should be remediated
- Top soil is not stored properly. Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45^{o}) and signed
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)

Photos
















All these conditions have to be remedied within seven days (by the 20 April) by the prime Contractor (Nantong Sanjian Georgia LLC)	
Date of site visits	06.04.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (02.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: LCIP/CW/11b-2021	
Contractor: „Satave Plus“	
Reference: Construction of Kindergarten in Kurdghelauri (Telavi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction site is not fenced from all sides. Construction sites should be properly fenced from all sides and equipped with lockable gate
- Hazardous Waste container is not installed properly. Proper container with relevant signs “HAZARDOUS WASTE”/ “ს ა ხ ი ფ ა თ ო ნ ა რ ჩ ე ნ ე ბ ი “ should be installed at the proper organized place with concrete floor and roofing
- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced).
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)
- Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45o), fenced by tape and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste

Photos

All these conditions have to be remedied within seven days (by the 09 May) by the prime Contractor (“Instali” LLC)

Date of site visits	29.04.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (02.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/09b-2021*	
Contractor: "Instali" LLC	
Reference: Construction of the Kindergarten in Kvemo Bodbe (Signagi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Making a fire at the construction area is prohibited
- Asbestos waste should be proper removed by authorized organization according agreement and Act of Acceptance of asbestos waste should be provided
- Complaint box is not installed. Proper box should be installed and signed (At entrance)
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Scrap at the construction site should be collected separately at one location, fenced and signed ("Scrap"/"ჯა რთი ")
- Hazardous Waste container is not installed. Proper container with relevant signs "HAZARDOUS WASTE"/ "ს ა ხ ი ფა თო ნ ა რჩ ე ნ ე ბ ი " should be installed at the proper organized place with concrete floor and roofing
- Household Waste container must be available on site. Container should be signed „HOUSEHOLD WASTE/ს ა ყ ოფა ც ხ ოვ რე ბ ო ნ ა რჩ ე ნ ე ბ ი ".
- Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed
- Construction waste is not fully removed from construction area. Construction waste should be removed completely and disposed according agreement
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)

Photos





All these conditions have to be remedied within seven days (by the 09 May) by the prime Contractor (“Instali” LLC)

Date of site visits	29.04.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (19.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/10a-2021*	
Contractor: "Instali" LLC	
Reference: Construction of the Kindergarten in Chiauri (Lagodekhi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Scrap at the construction site should be collected separately at one location, fenced and signed ("Scrap"/"ჯართი")
- Hazardous Waste container is not installed properly. Hazardous Waste container should be installed at the proper organized place with concrete floor and roofing.
- Hazardous waste should be removed/disposed according agreement with authorized organization
- Construction site is not fenced from all sides. Construction sites should be properly fenced from all sides and equipped with lockable gate
- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced (e.g. by tape)).
- Wooden Waste at the construction site should be fenced (e.g. by tape)
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste

Photos





All these conditions have to be remedied within seven days (by the 27 May) by the prime Contractor (“Instali” LLC)

Date of site visits	17.05.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (19.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/09b-2021*	
Contractor: "Instali" LLC	
Reference: Construction of the Kindergarten in Kvemo Bodbe (Signagi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Hazardous Waste container is not installed. Hazardous Waste container with relevant signs "HAZARDOUS WASTE"/ "ს ა ხ ი ფ ა თ ო ნ ა რ ჩ ე ნ ე ბ ი" should be installed at the proper organized place with concrete floor and roofing.
- Household Waste container is not installed. Proper Household Waste container should be installed at the site. Container should be signed „HOUSEHOLD WASTE/ს ა ყ ო ფ ა ც ხ ო ვ რ ე ბ ო ნ ა რ ჩ ე ნ ე ბ ი".
- Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed
- Hazardous waste should be removed/disposed according agreement with authorized organization
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste
- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced).
- Scrap at the construction site should be collected separately at one location, fenced and signed ("Scrap"/"ჯ ა რ თ ი")

Photos





All these conditions have to be remedied within seven days (by the 27 May) by the prime Contractor ("Instali" LLC)

Date of site visits	17.05.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (20.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: LCIP/CW/11b-2021	
Contractor: „Satave Plus“	
Reference: Construction of Kindergarten in Kurdghelauri (Telavi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction site is not fenced from all sides. Construction sites should be properly fenced from all sides and equipped with lockable gate
- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced).
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)
- Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste
- Scrap at the construction site should be collected separately at one location, fenced and have the appropriate inscription (“Scrap” / “ჯა რთი“).

Photos

All these conditions have to be remedied within seven days (by the 09 May) by the prime Contractor (“Instali” LLC)

Date of site visits	17.05.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (20.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/11a-2021*	
Contractor: Ltd Produce Investment	
Reference: Construction of the Kindergarten in Vardisubani (Telavi)	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Construction site is not fenced from all sides. Construction sites should be properly fenced from all sides and equipped with lockable gate
- Complaint box is not installed. Proper box should be installed and signed (At entrance)
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Top soil is not stored properly. Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45º), fenced by tape and signed
- Construction site is not arranged properly. Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly from household and construction waste
- Workers are not using complete Personal Protection Equipment (PPE). Workers always should use complete PPE (hard hats, goggles, gloves, vests, safety shoes)
- Scrap at the construction site should be collected separately at one location, fenced and signed ("Scrap"/"ჯა რთი ")
- Trees at the construction site are not protected. All trees at the construction territory should be protected (freed from construction materials and fenced).
- Hazardous Waste container is not installed. Proper container with relevant signs "HAZARDOUS WASTE"/"ს ა ხ ი ფა თო ნ ა რჩ ე ნ ე ბ ი " should be installed at the proper organized place with concrete floor and roofing
- Household Waste container must be available on site. Container should be installed and signed „HOUSEHOLD WASTE/ს ა ყ ოფა ც ხ ოვ რე ბ ო ნ ა რჩ ე ნ ე ბ ი".
- Relevant environmental documents is not available on the construction site (contractual requirements). Hard copies of all requested documents should be available
- Environmental and social specialists from contractor are not presented at the construction site
- Asbestos waste should be proper removed by authorized organization according agreement and Act of Acceptance of asbestos waste should be provided

Photos







All these conditions have to be remedied within seven days (by the 27 May) by the prime Contractor (Ltd ,, Prodius Investment ")

Date of site visits	17.05.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Non-Compliance Notice (27.05.22)

Project: Livable Cities Investment Project for Balanced Regional Development	**Non-compliance Notice**
Contract No: *LCIP/CW/05-2020*	
Contractor: Nantong Sanjian Georgia LLC	
Reference: Construction of Sport Complex in Akhaltsikhe	

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented **urgently.**

NON-COMPLIANCE

- Hazardous Waste container is not installed. Proper container with relevant signs “HAZARDOUS WASTE”/“ს ა ხ ი ფ ა თ ო ნ ა რ ჩ ე ნ ე ბ ი “ should be installed at the proper organized place with concrete floor and roofing
- Scrap at the construction site should be collected separately at one location, fenced and signed (“Scrap”/”ჯა რ თი “)
- Wooden waste at the construction site should be collected separately at one location, fenced and signed (“Wooden waste”/”ხ ი ს ნ ა რ ჩ ე ნ ე ბ ი ”)
- Construction waste is not removed completely from construction area. Construction waste should be removed completely and disposed according agreement
- Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- Top soil is not stored properly. Top soil should be stored separately in appropriate location (height of fill must not exceed 2 m and the inclination of the fill slope must not exceed 45°) and signed
- Fuel and lubricant containers are not stored properly. Fuel and lubricant containers should be stored at the proper organized place with concrete floor and roofing.
- Fuel and lubricants spill elimination items are not available at the construction area. Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Asbestos waste should be proper removed by authorized organization according agreement and Act of Acceptance of asbestos waste should be provided.

Photos





All these conditions have to be remedied within seven days (by the 3 June) by the prime Contractor (Nantong Sanjian Georgia LLC)

Date of site visits	20.05.2022
EPTISA – Environmental Specialist	Nika Gogitidze

Annex 3. Measurement Results

Kutaisi Swimming Pool

მიკრო ბიზნესის სტატუსის საწარმო „სერგო ხაცავა“

სერტიფიკატი № 011 -68350

შრომის და გარემოს პირობების მონიტორინგი. Monitoring of working conditions and environment

საქართველო, ქ.თბილისი, პეკინის გამ. 14/4. Email: s khatsava@yahoo.com, ტელ. 511-13-57-44
Georgia, Tbilisi, Pekin av. 14/4. Email: s khatsava@yahoo.com, Tel.(+995) 511-13-57-44

ჰაერის მტვერით დაბინძურების, ხმაურის და ვიბრაციის გაზომვების შედეგები
26.04.2022. $13^{00} – 13^{45}$ და 26.04.2022. $15^{00} – 15^{45}$
Dust air pollution, noise and vibration measurements on 26.04.2022. $13^{00} – 13^{45}$ and 26.04.2022. $15^{00} – 15^{45}$

№	გაზომვის წერტილის Measurement point		გაზომვის შედეგები Measurement results							
	ადგილ მდებარეობა და დრო Location and time	კოორდინატები Coordinates	ხმაური Amax დბ Noise Amax db	ვიბრო სიჩქარე Vibro Speed		ვიბრო აჩქარება Vibro acceleration		მტვერი მგ/მ³ Dust mg / m3		
				მმ/წმ mm/s	დბ db	მ/წმ² m/s²	დბ db	$Pm_{2.5}$	Pm_{10}	Total
1	ქუთაისი, იუსტიციის სახლის მიმდებარედ. $13^{00} – 13^{45}$ Kutaisi, near the House of Justice.$13^{00} – 13^{45}$	0307574 4681880	48,4	<0.1	<66	<0.1	<100	0.017	0.020	0.036
2	ქუთაისი, იუსტიციის სახლის მიმდებარედ. $15^{00} – 15^{45}$ Kutaisi, near the House of Justice.$15^{00} – 15^{45}$	0307574 4681880	73,8	<0.1	<66	<0.1	<100	0.021	0.032	0.054

1

Akhaltsikhe Sports Complex

Air Quality Measurement Results

	Measurement Point Names												Maximum permissible concentration of pollutants in the ambient air in populated areas[1] mg/m3
	School of Athletics				Public School №2				Sport school				
Coordinates	N - 4611773 E - 332791				N - 4612042 E – 332530				N - 4611780 E - 332465				
Measurement Time	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
NO2mg/m3	<0.008	<0.007	<0.008	<0.007	<0.006	<0.005	<0.004	<0.006	<0.006	<0.005	<0.004	<0.006	**0.008**
NO mg/m3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0,1	**<0.1**
SO2 mg/m3	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	**<0.01**
CO mg/m3	<0.27	<0.27	<0.25	<0.26	<0.25	<0.32	<0.31	<0.32	<0.33	<0.32	<0.33	<0.33	**<0.32**

Dust (PM2,5; PM10) Measurement Results

	Measurement Point Names												Maximum permissible concentration of pollutants in the ambient air in populated areas[1] mg/m3
	School of Athletics				Public School №2				Sport school				
Coordinates	N - 4611773 E - 332791				N - 4612042 E – 332530				N - 4611780 E - 332465				
Measurement Time	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
PM2,5mkg/ m3	0.028	0.028	0.028	0.022	0.024	0.028	0.023	0.024	0.028	0.025	0.026	0.028	**0.028**
PM10mkg/ m3	0.043	0.042	0.043	0.044	0.043	0.044	0.041	0.044	0.044	0.041	0.043	0.044	**0.044**

Noise Measurement Results

	Measurement Point Names		
	School of Athletics	Public School №2	Sport school
Coordinates	N - 4611773 E - 332791	N - 4612042 E – 332530	N - 4611780 E - 332465
Noise Amax db	49.7	51.1	47.3

Vibration Measurement Results

	Measurement Point Names		
	School of Athletics	Public School №2	Sport school
Coordinates	N - 4611773 E - 332791	N - 4612042 E – 332530	N - 4611780 E - 332465
Vibration Speed (mm/s)	<0.1 / <66 db	<0.1 / <66 db	<0.1 / <66 db
Vibration Acceleration (m/s^2)	<0.1 / <100 db	<0.1 / <100 db	<0.1 / <100 db

Zugdidi Sports Complex

Air Quality Measurement Results

	Measurement Point Names												**Maximum permissible concentration of pollutants in the ambient air in populated areas[1]** **mg/m3**
	Near the project site, checkpoint #1				Near the project site, checkpoint #2				Near the project site, checkpoint #3				
Coordinates	N – 4708511 E - 736011				N – 4708395 E – 736117				N – 4708547 E - 736210				
Measurement Time	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
NO2mg/m3	<0.001	<0.007	<0.001	<0.001	<0.006	<0.001	<0.001	<0.006	<0.009	<0.001	<0.001	<0.008	**0.011**
NO mg/m3	0	<0.1	0	0	<0.1	0	0	<0.1	<0.1	0	1	<0,1	**<0.1**
SO2 mg/m3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0,1	**<0.1**
CO mg/m3	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	**<0.01**

Dust (PM2,5; PM10) Measurement Results

	Measurement Point Names												**Maximum permissible concentration of pollutants in the ambient air in populated areas[1]** **mg/m3**
	Near the project site, checkpoint #1				Near the project site, checkpoint #2				Near the project site, checkpoint #3				
Coordinates	N – 4708511 E - 736011				N – 4708395 E – 736117				N – 4708547 E - 736210				
Measurement Time	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
PM2,5mkg/ m3	0.021	0.022	0.021	0.020	0.021	0.022	0.020	0.022	0.022	0.020	0.022	0.021	**0.022**
PM10mkg/ m3	0.027	0.026	0.026	0.027	0.027	0.026	0.027	0.027	0.026	0.027	0.026	0.027	**0.027**

Noise Measurement Results

	Measurement Point Names		
	Near the project site, checkpoint #1	Near the project site, checkpoint #2	Near the project site, checkpoint #3
Coordinates	N – 4708511 E - 736011	N – 4708395 E – 736117	N – 4708547 E - 736210
Noise Amax db	54.9	49.4	50.1

Vibration Measurement Results

	Measurement Point Names		
	Near the project site, checkpoint #1	Near the project site, checkpoint #2	Near the project site, checkpoint #3
Coordinates	N – 4708511 E - 736011	N – 4708395 E – 736117	N – 4708547 E - 736210
Vibration Speed (mm/s)	<0.1 / <66 db	<0.1 / <66 db	<0.1 / <66 db
Vibration Acceleration (m/s^2)	<0.1 / <100 db	<0.1 / <100 db	<0.1 / <100 db

Rustavi Sports Complex

Air Quality Measurement Results

	Checkpoint 1				Checkpoint 2				Checkpoint 3				Max. permissible concentration of pollutants inthe ambientair in populated areas
Coordinates	**N - 4602259 E - 499187**				**N - 4602148 E- 499225**				**N - 4602074 E - 499357**				
Measurement Time	**09: 00**	**13: 00**	**17: 00**	**21: 00**	**09: 00**	**13: 00**	**17: 00**	**21: 00**	**09: 00**	**13: 00**	**17: 00**	**21: 00**	
N02 mg/m3	<0.001	<0.007	<0.008	<0.00 8	<0.004	<0.006	<0.008	<0.008	<0.006	<0.007	<0.008	<0.008	**0.008**
N0 mg/m3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**<0.1**
S02 mg/m3	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	**<0.01**
CO mg/m3	<0. 27	<0.31	<0.32	<0.26	<0.27	<0.31	<0.30	<0.30	<0.32	<0.32	<0.30	<0.30	**<0.32**

Dust (PM2,5; PM10) Measurement Results

	Checkpoint 1				Checkpoint 2				Checkpoint 3				Max. permissible concentration of pollutants inthe ambientair in populated areas
Coordinates	**N - 4602259 E - 499187**				**N - 4602148 E- 499225**				**N - 4602074 E - 499357**				
Measurement Time	**10:00**	**13:00**	**16:00**	**19:00**	**10:00**	**13:00**	**16:00**	**19:00**	**10:00**	**13:00**	**16:00**	**19:00**	
PM2.5mkg/m3	0.027	0.027	0.028	0.027	0.028	0.020	0.025	0.025	0.026	0.028	0.026	0.027	**0.028**
PM10mkg/m3	0.043	0.041	0.041	0.04	0.043	0.044	0.041	0.043	0.044	0.041	0.043	0.041	**0.044**

Noise Measurement Results

	Checkpoint 1				Checkpoint 2				Checkpoint 3			
Coordinates	**N - 4602259 E - 499187**				**N - 4602148 E- 499225**				**N - 4602074 E - 499357**			
Measurement Time	**11:00**	**13:00**	**16:00**	**19:00**	**10:00**	**13:00**	**16:00**	**19:00**	**10:00**	**13:00**	**16:00**	**19:00**
Noise Amax/db	67.1	49.5	54.1	47.2	47.3	50.1	52.3	43.9	45.9	51.3	49.7	47.3

Vibration Measurement Results

	Checkpoint 1	Checkpoint 2	Checkpoint 3
Coordinates	**N - 4602259** **E - 499187**	**N - 4602148** **E- 499225**	**N - 4602074** **E - 499357**
Vibration speed (mm/s)	**<0.1 / < 60 db**	**<0.1 / < 52 db**	**<0.1 / <60 db**
Vibration acceleration (m/s^2)	**<0.1 / <80 db**	**<0.1 / < 80 db**	**<0.1 / < 80 db**

Kutaisi Kindergarten

#1 Dust Particles; Carbon Monoxide (CO); Ozone (O3),Nitrogen Oxides (NOx) andSulfur Oxides (SOx) monitoring results

Parameters	Minimum	Maximum	Average value of 1 hour measurements	Methods used
PM 10	0.010	0.015	0.012	Aeroqual SERIES500-PM Sensor
PM 2.5	0.007	0.010	0.009	Aeroqual SERIES500-PM Sensor
CO	0.8	2.2	1.6	Aeroqual SERIES500-CO Sensor
NOx	0.0	0.0	0.0	Aeroqual SERIES500-NOx Sensor
SOx	0.0	0.0	0.0	Aeroqual SERIES500-SOx Sensor
O3	0.0	0.0	0.0	Aeroqual SERIES500-SOx Sensor

#2 - Dust Particles; Carbon Monoxide (CO); Nitrogen Oxides (NOx),Ozone(O3) and Sulfur Oxides (SOx) monitoring results (mg/m3)

Parameters	Minimum	Maximum	Average value of 1 hour measurements	Methods used
PM 10	0.008	0.013	0.010	Aeroqual SERIES500-PM Sensor
PM 2.5	0.006	0.008	0.007	Aeroqual SERIES500-PM Sensor
CO	0.0	0.4	0.1	Aeroqual SERIES500-CO Sensor
NOx	0.0	0.021	0.010	Aeroqual SERIES500-NOx Sensor
SOx	0.0	0.0	0.0	Aeroqual SERIES500-SOx Sensor
O3	0.0	0.0	0.0	Aeroqual SERIES500-SOx Sensor

Noise Monitoring Results for Point #1

Different Parameters of Noise Levels	Results (Decibel)
LAFmin	40.9
LAFmax	73.1
LAFav	57

Noise Monitoring Results for Point #2

Different Parameters of Noise Levels	Results (Decibel)
LAFmin	40.0
LAFmax	75.8
LAFav	57.9

Vibration monitoring Point #1 Results

Different Parameters of Vibration Level	Results (m/s)
LAFmin	0.0
LAFmax	0.2
LAFav	0.1

Vibration monitoring Point #2 Results

Different Parameters of Vibration Level	Results (m/s)
LAFmin	0.0
LAFmax	0.1
LAFav	0.05

Kurdghelauri Kindergarten

Noise measurement results

N1 measurement		
Date	Location	Distance from the noise source
11.04.2022	Construction site	10 m.
N1 **measurement results**		
Average	10:37 - 12:33	
	65.3	

N 2 measurement		
Date	Location	Distance from the noise source
11.04.2022	Res. house	50 m.
N 2 **measurement results**		
Average	10:27 - 12:27	
	48.3	

Measurement results of major air pollutants

CO (mg/m3)	NO2 (mcg/m3)	SO2 (mcg/m3)	PM10 (mcg/m3)	PM2,5 (mcg/m3)
<0,0	**115**	**1.9**	**18**	**7**

Vibration measurement results

X direction	Y direction	Z direction
0,22	**0,16**	**0,19**

Supsa Kindergarten

Noise measurement results

N1 measurement		
Date	Location	Distance from the noise source
20.04.2022	Construction site	10 m.
N1 **measurement results**		
Average	11:10 - 13:30	
	49.6	

N 2 measurement		
Date	Location	Distance from the noise source
20.04.2022	Res. house	30 m.
N 2 **measurement results**		
Average	11:30 - 13:30	
	65	

Measurement results of major air pollutants

CO (mg/m3)	NO2 (mcg/m3)	SO2 (mcg/m3)	PM10 (mcg/m3)	PM2,5 (mcg/m3)
0,04	**169**	**2.16**	**20**	**6**

Vibration measurement results

X direction	Y direction	Z direction
0,16	**0,18**	**0,2**

Khajalia Kindergarten

Noise measurement results

N1 measurement		
Date	Location	Distance from the noise source
20.04.2022	Construction site	10 m.
N1 **measurement results**		
Average	14:06 - 16:06	
	52.6	

N 2 measurement		
Date	Location	Distance from the noise source
20.04.2022	Res. house	50 m.
N 2 **measurement results**		
Average	14:00 - 16:06	
	52.9	

Measurement results of major air pollutants

CO (mg/m3)	NO2 (mcg/m3)	SO2 (mcg/m3)	PM10 (mcg/m3)	PM2,5 (mcg/m3)
0,18	**167**	**2.2**	**6**	**3**

Vibration measurement results

X direction	Y direction	Z direction
0,19	**0,21**	**0,17**

Tsintskaro Kindergarten

Air Quality Measurement Results

№	Measured ingredient concentration mg/m3				
	Dust	Carbon Monoxide CO	Nitrogen dioxide NO_2	Sulfur dioxide SO_2	Total HydroCarbons C_nH_m
1	0,028	0,13	0,02	< 0,01	< 0,1

Noise and vibration Measurement Results

№	Vibration		Noise sound level, DB
	Velocation, mm/s	Acceleration, m/s^2	
1	< 0,1	< 0,1	54,2

Vardisubani Kindergarten

Air Quality Measurement Results

№	**Measured ingredient concentration mg/m3**				
	Dust	Carbon Monoxide CO	Nitrogen dioxide NO_2	Sulfur dioxide SO_2	Total HydroCarbons C_nH_m
1	0,021	0,18	0,015	< 0,01	< 0,1

Noise and vibration Measurement Results

№	**Vibration**		**Noise sound level, DB**
	Velocation, mm/s	Acceleration, m/s^2	
1	< 0,1	< 0,1	46,2

Shamgona Kindergarten

Air Quality Measurement Results

№	Measured ingredient concentration mg/m3				
	Dust	Carbon Monoxide CO	Nitrogen dioxide NO_2	Sulfur dioxide SO_2	Total HydroCarbons C_nH_m
1	0,021	0,14	0,009	< 0,01	< 0,1

Noise and vibration Measurement Results

№	Vibration		Noise sound level, DB
	Velocation, mm/s	Acceleration, m/s^2	
1	< 0,1	< 0,1	44,6

Dzveli Anaga Kindergarten

Measurement results

Measurement Parameter			Standard Value	Measurement Results							
				08:00 - 11:00		11:00 - 14:00		14:00 - 17:00		17:00 - 20:00	
				Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House
Noise dBA	Norm of Georgian legislation (Adjacent to Residential house)	Day	55	49	51.6	48	50.3	48.6	54.2	47.5	52
		Night	45								
	Recommendation of the "US National Institute for Occupational Safety and Health" (NIOSH)	During 8 Hour	85								
Vibration mm/sc	DIN 4150-3 Standard	5		0.23	0.37	0.25	0.23	0.2	0.27	0.25	0.7
Solid particles (µg/m3)	Standard	PM10	50	7	10	7	12	10	13	9	11
		PM2.5	25	3	6	5	8	5	8	4	6
Nitrogen dioxide (µg/m3)	Standard	200		152	155	157	162	163	159	160	165
Nitrogen monoxide (µg/m3)	Standard	60		25	27	33	31	35	30	26	28
Sulfur dioxide (µg/m3)	Standard	20		2	1	3	3	5	2	1	1

Measurement Parameter			Standard Value	Measurement Results							
				08:00 - 11:00		11:00 - 14:00		14:00 - 17:00		17:00 - 20:00	
				Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House
Carbon monoxide mg/m3	Standard	10		6.7	<0	<0	<0	<0	1.1	<0	<0
Copper (mg/kg)	Standard	33		Construction Site 7				Residential Building 8			
Zinc (mg/kg)	Standard	55		Construction Site 29				Residential Building 31			
Lead (mg/kg)	Standard	32		Construction Site 8				Residential Building 5			
Manganese (mg/kg)	Standard	700		Construction Site <100				Residential Building <100			
Iron (PPM)	Standard	20000 - 550000		Construction Site 95000				Residential Building 85000			

Kvemo Bodbe Kindergarten

Measurement results

Measurement Parameter			Standard Value	Measurement Results							
				08:00 - 11:00		11:00 - 14:00		14:00 - 17:00		17:00 - 20:00	
				Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House
Noise dBA	Norm of Georgian legislation (Adjacent to Residential house)	Day	55	66	41.1	67.6	38.8	51.9	38.4	45.4	37.9
		Night	45								
	Recommendation of the "US National Institute for Occupational Safety and Health" (NIOSH)	During 8 Hour	85								
Vibration mm/sc	DIN 4150-3 Standard	5		0.95	0.23	0.31	0.66	1.16	0.29	0.23	0.19
Solid particles (µg/m3)	Standard	PM10	50	8	5	13	6	7	4	6	3
		PM2.5	25	4	2	3	2	4	3	3	2
Nitrogen dioxide (µg/m3)	Standard	200		163	160	168	158	143	150	138	143
Nitrogen monoxide (µg/m3)	Standard	60		50	48	39	38	47	41	51	38
Sulfur dioxide (µg/m3)	Standard	20		2	2	3	1	2	1	2	<0

Measurement Parameter			Standard Value	Measurement Results							
				08:00 - 11:00		11:00 - 14:00		14:00 - 17:00		17:00 - 20:00	
				Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House
Carbon monoxide mg/m3	Standard	10		<0	<0	<0	<0	<0	<0	<0	<0
Copper (mg/kg)	Standard	33		Construction Site 12				Residential House 10			
Zinc (mg/kg)	Standard	55		Construction Site 40				Residential House 35			
Lead (mg/kg)	Standard	32		Construction Site 9				Residential House 11			
Manganese (mg/kg)	Standard	700		Construction Site 120				Residential House <100			
Iron (PPM)	Standard	20000 - 550000		Construction Site 66000				Residential House 70000			

Senaki and Poti Kindergarten

მიკრო ბიზნესის სტატუსის საწარმო „სერგო ხაცავა“

სერტიფიკატი № 011 -68350

შრომის და გარემოს პირობების მონიტორინგი. Monitoring of working conditions and environment

საქართველო, ქ.თბილისი, პეკინის გამ. 14/4. Email: s_khatsava@yahoo.com, ტელ. 511-13-57-44
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ატმოსფერული ჰაერის ფონური დაბინძურების ინსტრუმენტალური გაზომვის შედეგები

ქ. ფოთი. ნაკვეთი ს/კ 04.02.12.844. 05.01.2022წ.

გაზომვის ადგილი და კოორდინატები: ნ. ბარათაშვილის ქ. № 105 მიმდებარედ

X – 37T721090; Y – 4667616

№	გაზომილი ინგრედიენტების კონცენტრაცია მგ/მ³					ვიბრაცია		ხმაურის
	მტვერი	ნახშირბადის მონოქსიდი CO	აზოტის დიოქსიდი NO_2	გოგირდის დიოქსიდი SO_2	ჯამური ნახშირწყალბადები C_nH_m	სიჩქარე მმ/წმ	აჩქარება მ/წმ²	ბგერის დონე Amax დბ
1	0,021	0,16	0,019	< 0,01	< 0,1	< 0,1	< 0,1	46,8

ქ. სენაკი. ნაკვეთი ს/კ 44.01.35.441. 05.01.2022წ.

გაზომვის ადგილი და კოორდინატები: სენაკი, ელიავს და მედეას ქ. გადაკვეთის მიმდებარედ.

X – 38T255671; Y – 4684523

№	გაზომილი ინგრედიენტების კონცენტრაცია მგ/მ³					ვიბრაცია		ხმაურის
	მტვერი	ნახშირბადის მონოქსიდი CO	აზოტის დიოქსიდი NO_2	გოგირდის დიოქსიდი SO_2	ჯამური ნახშირწყალბადები C_nH_m	სიჩქარე მმ/წმ	აჩქარება მ/წმ²	ბგერის დონე Amax დბ
1	0,021	0,16	0,023	< 0,01	< 0,1	< 0,1	< 0,1	47,5

გაზომვის დროს გამოყენებულია ხელსაქყოები:/During measurement tools used:
ხმაური/Noise - Mini Sound Level Meter N05CC;
ვიბრაცია/Vibration- Smart Sensor ® AR63B Vibration Meter:

დამტვერიანობა/ Dust- Gasella Mikro Dust Pro ;
აზოტის დიოქსიდის და ნახშირბადის მონოოქსიდის - nitrogen dioxide and carbon monoxide - Элан CO/NO_2;

ჯამური ნახშირწყალბადების - total hydrocarbon - MiniRae 7600;
გოგირდის დიოქსიდის - sulfur dioxide – WASP-XM-E-SO2.

მონიტორინგის ჩატარებაზე პასუხისმგებელი პირი,

ტექნიკური მენეჯერი: სერგეი ხაცავა

Didichkoni Kindergarten

Noise measurement results

N1 measurement		
Date	Location	Distance from the noise source
21.04.2022	Construction site	10 m.
N1 **measurement results**		
Average	10:40 - 12:40	
	46.5	

N 2 measurement		
Date	Location	Distance from the noise source
21.04.2022	Medical facility	50 m.
N 2 **measurement results**		
Average	10:35 - 12:35	
	51.4	

Measurement results of major air pollutants

CO (mg/m3)	NO2 (mcg/m3)	SO2 (mcg/m3)	PM10 (mcg/m3)	PM2,5 (mcg/m3)
<0,0	**93**	**1.6**	**11**	**6**

Vibration measurement results

X direction	Y direction	Z direction
0,16	**0,23**	**0,18**

Chiauri Kindergarten

Measurement Parameter	Measurement Results							
	08:00 - 11:00		11:00 - 14:00		14:00 - 17:00		17:00 - 20:00	
	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House	Constr. Site	Res. House
Noise dBA	39.8	55.9	42	53.3	40	54.6	43.9	53.5
Vibration mm/sc	0.22	0.25	0.24	0.22	0.24	0.26	0.26	0.20
Solid particles (µg/m3) PM 10	7	10	6	15	8	11	6	22
Solid particles (µg/m3) PM 2.5	3	5	4	9	5	10	6	15
Nitrogen monoxide (µg/m3)	32	35	41	37	38	44	38	43
Nitrogen dioxide (µg/m3)	150	145	154	152	148	149	163	157
Sulfur dioxide (µg/m3)	1	1	2	3	3	2	5	4

მიკრო ბიზნესის სტატუსის საწარმო „სერგო ხაცავა“

საქართველო, ქ.თბილისი, პეკინის გამ. 14/4, Email: s_khatsava@yahoo.com, ტელ. 511-13-57-44
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სერტიფიკატი № 011 -68350

ჰაერის ფონური დაბინძურების და ხმაურის ბგერის დონეს
მონიტორინგის შედეგები.

ჭაბუკიანი. 01.05.2022

№	გაზომვის ადგილი		დაბინძურების ინგრედიენტის კონცენტრაცია მგ/მ³				ხმაურის ბგერის დონე Aდბ
	ლოკაცია	კოორდინატები	მტვერი	ნახშირბადის მონოქსიდი	აზოტის დიოქსიდი	გოგირდის დიოქსიდი	
1	სამშენებლო მოედანი	X-0582942 Y-4628478	0,026	0,68	0,005	<0,01	44,7
2	უახლოეს მოსახლესთან	X-0582975 Y-4628468	0,025	0,62	0,005	<0,01	43,9
ნორმა 297n მიხედვით			0,5	5,0	0,2	0,5	50

დირექტორი: ს. ხაცავა

Bandza Kindergarten

მიკრო ბიზნესის სტატუსის საწარმო „სერგო ხაცავა“

სერტიფიკატი № 011 -68350

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ჰაერის ფონური დაბინძურების და ხმაურის ბგერის დონეს

მონიტორინგის შედეგები.

ბანძა. 26.04.2022

№	გაზომვის ადგილი		დაბინძურების ინგრედიენტის კონცენტრაცია მგ/მ³				ხმაურის ბგერის დონე Aდბ
	ლოკაცია	კოორდინატები	მტვერი	ნახშირბადის მონოქსიდი	აზოტის დიოქსიდი	გოგირდის დიოქსიდი	
1	სამშენებლო მოედანი	X-0276193 Y-4692102	0,032	0,36	0,002	<0,01	43,5
2	უახლოეს მოსახლესთან	X-0276171 Y-4692066	0,028	0,35	0,002	<0,01	43,2
ნორმა 297n მიხედვით			0,5	5,0	0,2	0,5	50

დირექტორი: ს. ხაცავა

მიკრო ბიზნესის სტატუსის საწარმო „სერგო ხაცავა“

სერტიფიკატი № 011 -68350

საქართველო, ქ.თბილისი, პეკინის გამ. 14/4. Email: s_khatsava@yahoo.com, ტელ. 511-13-57-44
Georgia, Tbilisi, Pekin av. 14/4. Email: s_khatsava@yahoo.com, Tel.(+995) 511-13-57-44

ჰაერის ფონური დაბინძურების და ხმაურის ბგერის დონეს

მონიტორინგის შედეგები.

ჩიტაწყარი. 26.04.2022

№	გაზომვის ადგილი		დაბინძურების ინგრედიენტის კონცენტრაცია მგ/მ³				ხმაურის ბგერის დონე Adბ
	ლოკაცია	კოორდინატები	მტვერი	ნახშირბადის მონოქსიდი	აზოტის დიოქსიდი	გოგირდის დიოქსიდი	
1	სამშენებლო მოედანი	X-0734064 Y-4707059	0,029	0,44	0,004	<0,01	48,2
2	უახლოეს მოსახლესთან	X-0734081 Y-4707081	0,027	0,43	0,004	<0,01	48,0
ნორმა 297n მიხედვით			0,5	5,0	0,2	0,5	50

დირექტორი: ს. ხაცავა

Velistsikhe Urban Upgrade

Measurement results of Air Quality

	Description of survey points								The maximum allowable limits of pollutants in the ambient air of populated areas [1] mg / m3
	Near the theater				Near the former kindergarten area				
Coordinates	X – 562889,905 Y – 4628845,789				X – 563040,167 Y – 4628557,619				
Measurement time, hr	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
NO_2 mg/m^3	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	**0,2**
NO mg/m^3	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	**0,4**
SO_2 mg/m^3	<0,5	<0,5	<0,5	<0,5	<0,5	<0,5	<0,5	<0,5	**0,5**
CO mg/m^3	1,0	<1,0	<1,0	1,0	<1,0	1,0	<1,0	<1,0	**5**

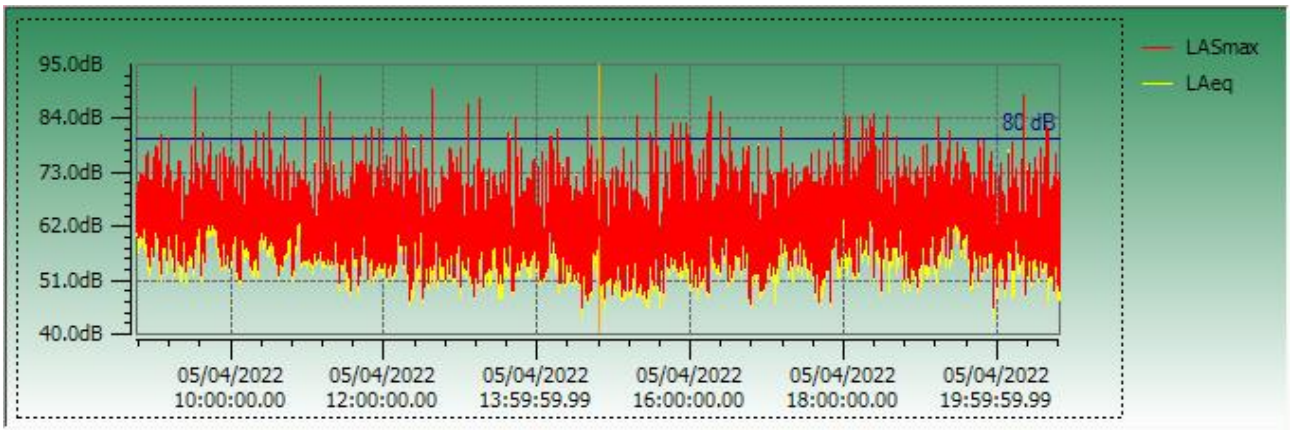
Dust (PM2,5; PM10) content measurement results

	Description of survey points								The maximum allowable limits of pollutants in the ambient air of populated areas are µgr/m^3. (Averaging period 24 hours)
	Near the theater				Near the former kindergarten area				
Coordinates	X – 562889,905 Y – 4628845,789				X – 563040,167 Y – 4628557,619				
Measurement time, hr	**09:00**	**13:00**	**17:00**	**21:00**	**09:00**	**13:00**	**17:00**	**21:00**	
PM2,5 µgr/m^3	12	7	8	17	16	10	9	21	**25**
PM10 µgr/m^3	18	9	12	23	24	15	12	31	**50**

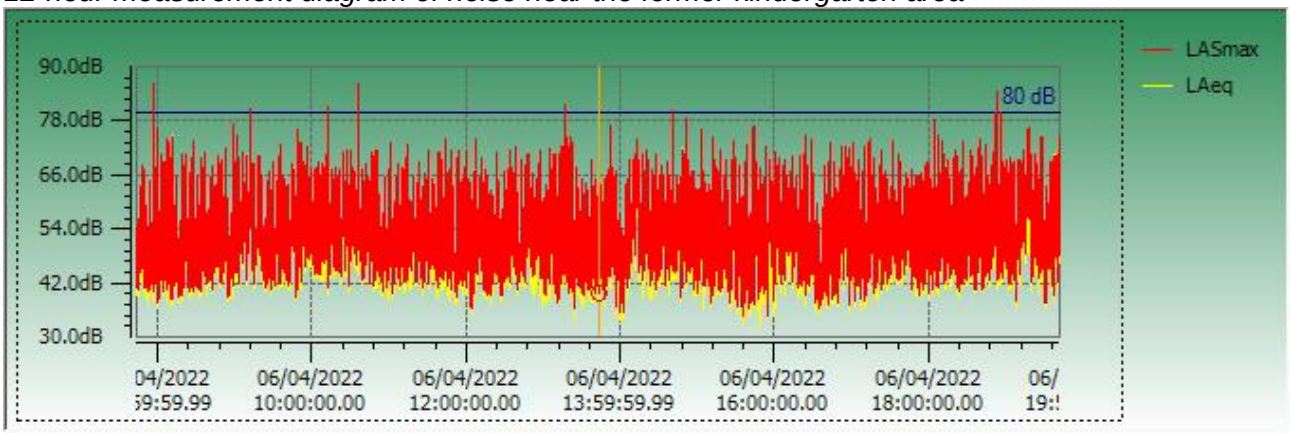
Results of the noise level measurement

№	Description of survey points	Coordinates	*The results of 12 hours of noise level measurement,* LAeq/DB
1	**Near the theater**	**X – 562889,905 Y – 4628845,789**	66
2	**Near the former kindergarten area**	**X – 563040,167 Y – 4628557,619**	58
maximum allowable limit [3], LAeq/DB			**45-50**

12-hour measurement diagram of noise near the theater,



12-hour measurement diagram of noise near the former kindergarten area



Vibration level measurement results. Point №1. Near the theater.

Measurement time, hrs	Point №1. Near the theater						Permissible value of oscillation velocityDIN4150 [4]
	Displacement,mm; peak-to-peak values			Velocity, mm/sec; meansquare values;			
	X	Y	Z	X	Y	Z	
09:00	0,005	0,002	0,007	0,01 (46)	<0,01	0,01 (46)	5 - 15 mm / sec 10-50 Hz for frequencies
13:00	0,001	<0,001	0,002	<0,01	<0,01	<0,01	
17:00	0,001	<0,001	0,004	<0,01	<0,01	<0,01	
21:00	0,003	<0,001	0,003	<0,01	0,01 (46)	<0,01	

Note: In parentheses, the vibration velocity levels are given in decibels.

X and Y - vibration horizontal component, Z - vertical component.

Vibration level measurement results. Point №2. Near the former kindergarten area

Measurement time, hrs	Point №2. Near the former kindergarten area						Permissible value of oscillation velocityDIN4150 [4]
	Displacement,mm; peak-to-peak values			Velocity, mm/sec; meansquare values;			
	X	Y	Z	X	Y	Z	
09:00	<0,001	<0,001	0,009	<0,01	<0,01	<0,01	5 - 15 mm / sec 10-50 Hz for frequencies
13:00	<0,001	<0,001	<0,001	<0,01	<0,01	<0,01	
17:00	<0,001	<0,001	<0,001	<0,01	<0,01	<0,01	
21:00	<0,001	<0,001	<0,001	<0,01	<0,01	<0,01	

Annex 4. Agreement with Solid Waste Management Company on Hazardous Waste Disposal under the Velistsikhe Project

მომსახურების ხელშეკრულება N20

ქ. თბილისი 16.02.2022

შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია", მისი დირექტორის გიორგი მუხიგულის სახით, (შემდგომში წოდებული როგორც „შემსრულებელი") ერთის მხრივ და მეორეს მხრივ შპს „ჯავა" წარმოდგენილი მისი კომერციული დირექტორის გიორგი ჯავახაძის სახით, (შემდგომში წოდებული როგორც „დამკვეთი") მეორის მხრივ, საქართველოს მოქმედი კანონმდებლობისა და სანარმის წესდების მე-8 მუხლის მე-8 პუნქტის შესაბამისად, ურთიერთ შეთანხმების საფუძველზე დებენ ხელშეკრულებას შემდეგზე:

1.1 შემსრულებელი ორგანიზაცია 2017 წლის 08 თებერვლის N8-ი ბრძანების საფუძველზე, ახორციელებს იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სპეციფიური მყარი ნარჩენის (მაგ. აზბესტის შემცველი ნარჩენი) განთავსების მომსახურებას შემსრულებლის ბალანსზე არსებული ქ.თელავის არასახიფათო ნარჩენების ნაგავსაყრელზე (შემდგომში – მომსახურება).

მუხლი 2. ხელშეკრულების პირობები

2.1 შემსრულებელი ვალდებულია დროულად და ხარისხიანად მოემსახუროს დამკვეთს და უზრუნველყოს ხელშეკრულების 1.1 პუნქტში აღნიშნული მომსახურების გაწევა.

მუხლი 3. მხარეთა უფლება-მოვალეობები

3.1 შემსრულებლის უფლება-მოვალეობები:

3.2 დროულად და ხარისხიანად განახორციელოს 1.1 მუხლში აღნიშნული მომსახურება.

3.3 მომსახურების გაწევისას დაიცვას საერთაშორისო სტანდარტებით და ტექნიკური რეგლამენტებით განსაზღვრული პირობები.

3.4 ხელშეკრულებით განსაზღვრულ ვადაში დამკვეთისაგან მოითხოვოს მომსახურების ღირებულების დროულად გადახდა.

3.5 დამკვეთისაგან მოითხოვოს წინამდებარე ხელშეკრულების პირობების დაცვა.

3.6 დამკვეთის უფლება-მოვალეობები:

3.7 ხელშეკრულების მოქმედების პერიოდში მოითხოვოს შემსრულებლისაგან წინამდებარე ხელშეკრულების პირობების დაცვა.

3.8 ხელშეკრულებით განსაზღვრულ ვადაში და პირობებით გადაუხადოს შემსრულებელს მომსახურების ღირებულება.

3.9 შემსრულებლის კუთვნილ არასახიფათო ნარჩენების ნაგავსაყრელზე ნარჩენის შემოტანა უზრუნველყოს სახანძრო და უსაფრთხოების ნორმების დაცვით.

მუხლი 4. ანგარიშსწორება და ხელშეკრულების ღირებულება

4.1 1 (ერთი) ტონა იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სპეციფიური მყარი ნარჩენის (მაგ. აზბესტის შემცველი ნარჩენი) განთავსების მომსახურების ღირებულება შეადგენს 35 (ოცდათხუთმეტი ლარი) ლარს დღგ-ს ჩათვლით.

4.2 დამკვეთი ვალდებულია მიღებული მომსახურების თანხა ჩარიცხოს შემსრულებლის საბანკო ანგარიშზე შესაბამისი ანგარიშ-ფაქტურის ატვირთვიდან 10 (ათი) კალენდარულ დღეში.

4.3 შემსრულებლის მიერ წინამდებარე ხელშეკრულებით ნაკისრი ვალდებულებების შესრულების შემდეგ, მხარეები adგენენ ნარჩენების განთავსების აქტს.

4.4 შემსრულებლის მხრიდან ნარჩენების განთავსების აქტს ხელს აწერს შემსრულებლის სტრუქტურული ერთეულის - რეგიონული მართვის დეპარტამენტის თანამშრომელი შესაბამის რეგიონში.

მუხლი 5. ხელშეკრულების მოქმედების ვადა და მისი შეწყვეტის წესი

5.1 წინამდებარე ხელშეკრულება ძალაში შედის მხარეთა მიერ მისი ხელმოწერის მომენტიდან და მოქმედებს მხარეთა მიერ ნაკისრი ვალდებულებების სრულად და ჯეროვნად შესრულებამდე - 2022 წლის 31 დეკემბრის ჩათვლით.

5.2 ხელშეკრულების ვადამდე შეწყვეტა მხარეებს არ ათავისუფლებთ ხელშეკრულების შეწყვეტამდე შესასრულებელი ვალდებულების შესრულების მოვალეობისაგან.

მუხლი 6. სადავო საკითხების მოგვარება

6.1 დამკვეთსა და შემსრულებელს შორის წინამდებარე ხელშეკრულების რეალიზაციისას წარმოშობილი სადავო საკითხები წესრიგდება მხარეთა შეთანხმებით, ხოლო შეთანხმების მიუღწევლობის შემთხვევაში სადავო საკითხს განიხილავს სასამართლო.

მუხლი 7. დასკვნითი დებულებები

7.1 წინამდებარე ხელშეკრულების ყველა მუხლი და დანართი წარმოადგენს მის განუყოფელ ნაწილს. ხელშეკრულებაში ცვლილების შეტანა შეიძლება მოხდეს მხარეთა შეთანხმებით მხოლოდ წერილობით.

7.2 ხელშეკრულების მხარეები თანხმდებიან მასზედ, რომ იმ შემთხვევაში, თუ შემსრულებელი ორგანიზაციის 2017 წლის 08 თებერვლის N8-ი ბრძანების დანართში, რომლითაც რეგულირდება შეხატანი ნარჩენის სახეობები და საფასური შევა რაიმე სახის ცვლილება, ხელშეკრულება დაკორექტირდება შესაბამისად.

7.3 წინამდებარე ხელშეკრულება შედგენილია 2 (ორი) თანაბარი იურიდიული ძალის მქონე ეგზემპლარად ქართულ ენაზე. ერთი ეგზემპლარი გადაეცემა დამკვეთს, ხოლო ერთი ეგზემპლარი ინახება შემსრულებელთან.

მუხლი 8. მხარეთა რეკვიზიტები და ხელმოწერები:

შემსრულებელი:

შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია", იურიდიული მის: ქ. თბილისი, ანა პოლიტკოვსკაიას ქ. N14 შე.3 სართული; საიდენტიფიკაციო კოდი: 404942470, საბანკო რეკვიზიტები: ბანკი: სს „თიბისი ბანკი", ბანკის კოდი: TBCBGE22, ანგარიშის ნომერი: GE51TB7161936080100005.

ხელმოწერა _______________ გიორგი მუხიგული

დამკვეთი:

შპს „ჯავა" იურიდიული მისამართი: საქართველო, თბილისი, ნაძალადევის რაიონი, ქვემოთის ქ., კორპ. N6, ბ. 25 საიდენტიფიკაციო კოდი: 20[illegible]86

ხელმოწერა _______________ გიორგი ჯავახაძე

Annex 5. Agreement with Solid Waste Management Company on disposal of Construction Waste under the Velistsikhe Project

მომსახურების ხელშეკრულება N20

ქ. თბილისი 16.02.2022

შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია", მისი დირექტორის გიორგი მუხიშვილის სახით, (შემდგომში წოდებული როგორც „შემსრულებელი") ერთის მხრივ და მეორე მხრივ შპს „ჯავა" წარმოდგენილი მისი კომერციული დირექტორის გიორგი ჯავახაძის სახით, (შემდგომში წოდებული როგორც „დამკვეთი") მეორის მხრივ, საქართველოს მოქმედი კანონმდებლობისა და საწარმოს წესდების მე-8 მუხლის მე-8 პუნქტის შესაბამისად, ურთიერთ შეთანხმების საფუძველზე დებენ ხელშეკრულებას შემდეგზე:

1.1 შემსრულებელი ორგანიზაცია 2017 წლის 08 თებერვლის N8-ო ბრძანების საფუძველზე, ახორციელებს იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სპეციფიური მყარი ნარჩენის (მაგ. აზბესტის შემცველი ნარჩენი) განთავსების მომსახურებას შემსრულებლის ბალანსზე არსებული ქ.თელავის არასახიფათო ნარჩენების ნაგავსაყრელზე (შემდგომში – მომსახურება).

მუხლი 2. ხელშეკრულების პირობები

2.1 შემსრულებელი ვალდებულია დროულად და ხარისხიანად მოემსახუროს დამკვეთს და უზრუნველყოს ხელშეკრულების 1.1 პუნქტში აღნიშნული მომსახურების გაწევა.

მუხლი 3. მხარეთა უფლება-მოვალეობები

3.1 შემსრულებლის უფლება-მოვალეობები:

3.2 დროულად და ხარისხიანად განახორციელოს 1.1 მუხლში აღნიშნული მომსახურება.

3.3 მომსახურების გაწევისას დაიცვას საერთაშორისო სტანდარტებით და ტექნიკური რეგლამენტებით განსაზღვრული პირობები.

3.4 ხელშეკრულებით განსაზღვრულ ვადაში დამკვეთისაგან მოითხოვოს მომსახურების ღირებულების დროულად გადახდა.

3.5 დამკვეთისაგან მოითხოვოს წინამდებარე ხელშეკრულების პირობების დაცვა.

3.6 დამკვეთის უფლება-მოვალეობები:

3.7 ხელშეკრულების მოქმედების პერიოდში მოითხოვოს შემსრულებლისაგან წინამდებარე ხელშეკრულების პირობების დაცვა.

3.8 ხელშეკრულებით განსაზღვრულ ვადაში და პირობებით გადაუხადოს შემსრულებელს მომსახურების ღირებულება.

3.9 შემსრულებლის კუთვნილ არასახიფათო ნარჩენების ნაგავსაყრელზე ნარჩენის შემოტანა უზრუნველყოს სახანძრო და უსაფრთხოების ნორმების დაცვით.

მუხლი 4. ანგარიშსწორება და ხელშეკრულების ღირებულება

4.1 1 (ერთი) ტონა იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სპეციფიური მყარი ნარჩენის (მაგ. აზბესტის შემცველი ნარჩენი) განთავსების მომსახურების ღირებულება შეადგენს 35 (ოცდათხუთმეტი ლარი) ლარს დღგ-ს ჩათვლით.

4.2 დამკვეთი ვალდებულია მიღებული მომსახურების თანხა ჩარიცხოს შემსრულებლის საბანკო ანგარიშზე შესაბამისი ანგარიშ-ფაქტურის ატვირთვიდან 10 (ათი) კალენდარულ დღეში.

4.3 შემსრულებლის მიერ წინამდებარე ხელშეკრულებით ნაკისრი ვალდებულებების შესრულების შემდეგ მხარეები ადგენენ ნარჩენების განთავსების აქტს.

4.4 შემსრულებლის მხრიდან ნარჩენების განთავსების აქტს ხელს აწერს შემსრულებლის სტრუქტურული ერთეულის - რეგიონული მართვის დეპარტამენტის თანამშრომელი შესაბამის რეგიონში.

მუხლი 5. ხელშეკრულების მოქმედების ვადა და მისი შეწყვეტის წესი

5.1 წინამდებარე ხელშეკრულება ძალაში შედის მხარეთა მიერ მისი ხელმოწერის მომენტიდან და მოქმედებს მხარეთა მიერ ნაკისრი ვალდებულებების სრულად და ჯეროვნად შესრულებამდე - 2022 წლის 31 დეკემბრის ჩათვლით.

5.2 ხელშეკრულების ვადამდე შეწყვეტა მხარეებს არ ათავისუფლებს ხელშეკრულების შეწყვეტამდე შესასრულებელი ვალდებულების შესრულების მოვალეობისაგან.

მუხლი 6. სადავო საკითხების მოგვარება

6.1 დამკვეთსა და შემსრულებელს შორის წინამდებარე ხელშეკრულების რეალიზაციისას წარმოშობილი სადავო საკითხები წყდება მხარეთა შეთანხმებით, ხოლო შეთანხმების მიუღწევლობის შემთხვევაში სადავო საკითხს განიხილავს სასამართლო.

მუხლი 7. დასკვნითი დებულებები

7.1 წინამდებარე ხელშეკრულების ყველა მუხლი და დანართი წარმოადგენს მის განუყოფელ ნაწილს. ხელშეკრულებაში ცვლილების შეტანა შეიძლება მოხდეს მხარეთა შეთანხმებით მხოლოდ წერილობით.

7.2 ხელშეკრულების მხარეები თანხმდებიან მასზედ, რომ იმ შემთხვევაში, თუ შემსრულებელი ორგანიზაციის 2017 წლის 08 თებერვლის N8-ო ბრძანების დანართში, რომლითაც რეგულირდება შესატანი ნარჩენის სახეობები და საფასური შევა რაიმე სახის ცვლილება, ხელშეკრულება დაკორექტირდება შესაბამისად.

7.3 წინამდებარე ხელშეკრულება შედგენილია 2 (ორი) თანაბარი იურიდიული ძალის მქონე ეგზემპლარად ქართულ ენაზე. ერთი ეგზემპლარი გადაეცემა დამკვეთს, ხოლო ერთი ეგზემპლარი ინახება შემსრულებელთან.

მუხლი 8. მხარეთა რეკვიზიტები და ხელმოწერები:

შემსრულებელი:

შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია", იურიდიული მის: ქ. თბილისი, ანა პოლიტკოვსკაიას ქ. N14 მე-3 სართული; საიდენტიფიკაციო კოდი: 404942470, საბანკო რეკვიზიტები: ბანკი: სს „თიბისი ბანკი", ბანკის კოდი: TBCBGE22, ანგარიშის ნომერი: GE51TB7161936080100005.

ხელმოწერა ____________ გიორგი მუხიშვილი

დამკვეთი:

შპს „ჯავა" იურიდიული მისამართი: საქართველო, თბილისი, ნაძალადევის რაიონი, ქვიშხეთის ქ., კორპ. N6, ბ. 25 საიდენტიფიკაციო კოდი: 206[illegible]86

ხელმოწერა გიორგი ჯავახაძე

Annex 6. Disposal and Transporting of Asbestos-Containing Waste under the Velistsikhe Project

პოლიგონზე მყარი ნარჩენების განთავსების აქტი № 61599

თარიღი: 29.06.2022

შპს "საქართველოს მყარი ნარჩენების მართვის კომპანია"

LTD SOLID WASTE MANAGEMENT COMPANY OF GEORGIA

	ნარჩენის ტიპი	რ-ბა [ტონა]	ერთეულის ფასი [დღგ-ს ჩათვლით]	ჯამი [დღგ-ს ჩათვლით]
	[illegible]	3,020	35	105,70

სულ: 105,70 ლარი

გადარიცხვასთან დანიშნულებაში აუცილებლად მიუთითეთ აქტის (აქტების) ნომერი!

მიღება ჩაბარების აქტი

ქ. თბილისი 29.06.2022 წ.

შ.პ.ს. „ეკო სერვის ჯორჯია"(405 123 566) შემდგომში მოხსენიებული როგორც "შემსრულებელი" ერთის მხრივ, მისი დირექტორის ბესარიონ ჩანქსელიანის სახით და მეორეს მხრივ **შპს „ჯავა" (200 216 186),** შემდგომში მოხსენიებული როგორც "დამკვეთი", მისი დირექტორის გიორგი ჯავახაძეს სახით, ჩვენს შორის 2022 წლის 29 ივნისს დადებული ხელშეკრულების საფუძველზე ვაფორმებთ მიღება- ჩაბარების აქტს .

"შემსრულებელმა" მხარეებს შორის არსებული ხელშეკრულების შესაბამისად მიიღო შემდეგი სახის მომსახურება:

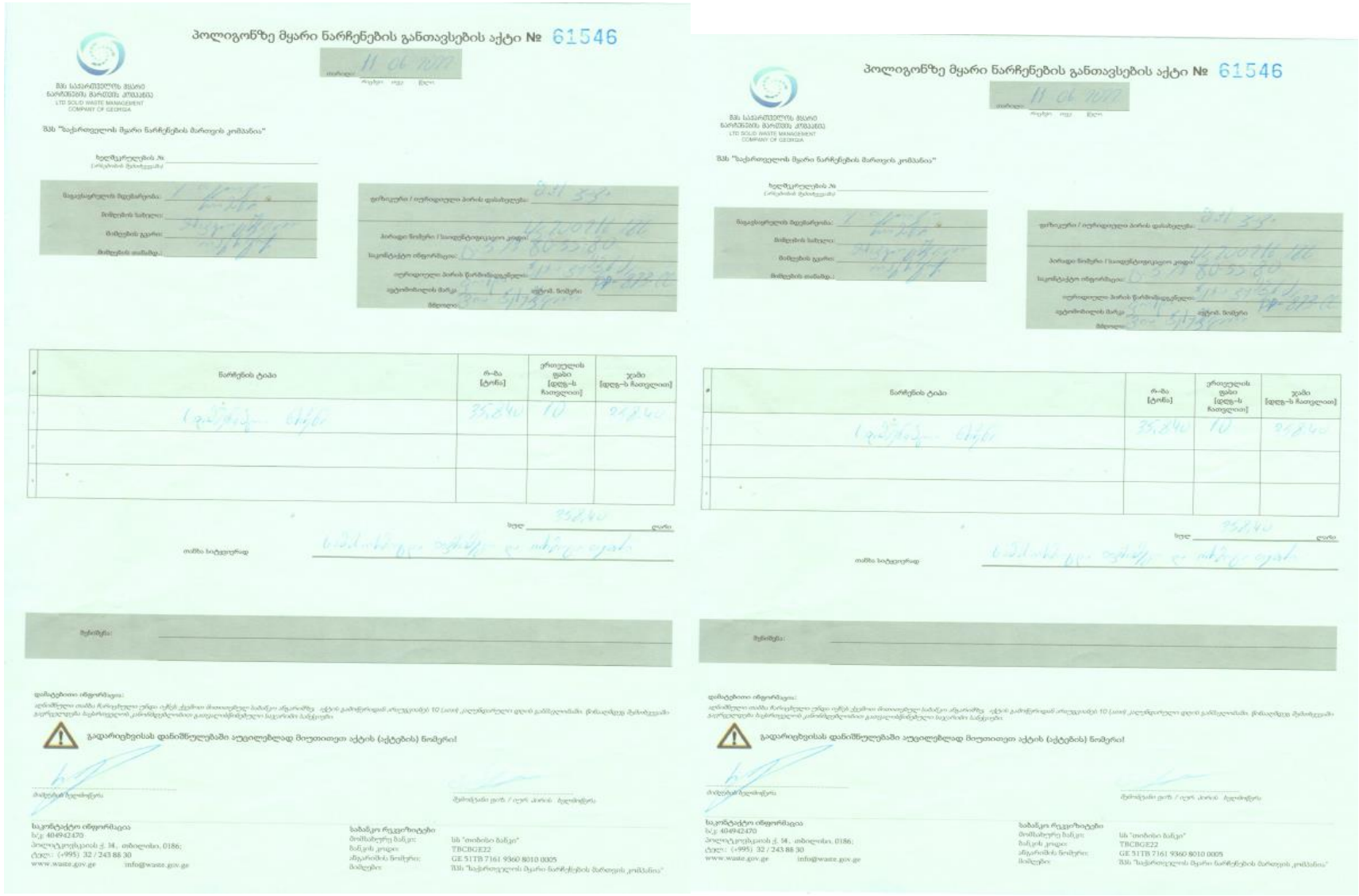
N	დასახელება	რაოდენობა	ჯამში
1	სახიფათო ნარჩენის (აზბესტის) ტრანსპორტირება	1 სვლა	1,200.00 ₾

სულ თანხა დღგ-ს ჩათვლით:	1,200.00 ₾

კონტრაქტით გათვალისწინებული სამუშაოები შესრულდა კეთილსინდისიერად და სრულად. დამკვეთს შემსრულებლის მიმართ პრეტენზია არ გააჩნია.

მომსახურების გამწევი	მომსახურების მიმღები
შპს „ეკო სერვის ჯორჯია"	შპს „ჯავა"
ს/კ: 405 123 566	ს/კ: 200 216 186
ანგ ნომერი : GE79BG0000000587246700	
დირექტორი: ბ. ჩანქსელიანი	დირექტორი: გიორგი ჯავახაძე
ხელმოწერა	ხელმოწერა

Annex 7. Disposal of Construction waste on the landfill of the Solid Waste Management Company in Telavi



პოლიგონზე მყარი ნარჩენების განთავსების აქტი № 61546

პოლიგონზე მყარი ნარჩენების განთავსების აქტი № 61546

პოლიგონზე მყარი ნარჩენების განთავსების აქტი № 59998

თარიღი: 19.05.2022
რიცხვი თვე წელი

შპს საქართველოს მყარი ნარჩენების მართვის კომპანია
LTD SOLID WASTE MANAGEMENT COMPANY OF GEORGIA

შპს "საქართველოს მყარი ნარჩენების მართვის კომპანია"

ხელშეკრულების № ____
(არსებობის შემთხვევაში)

ნაგავსაყრელის მდებარეობა: [illegible]
მიმღების სახელი: [illegible]
მიმღების გვარი: [illegible]
მიმღების თანამდ.: [illegible]

ფიზიკური / იურიდიული პირის დასახელება: [illegible]
პირადი ნომერი / საიდენტიფიკაციო კოდი: [illegible]
საკონტაქტო ინფორმაცია: [illegible]
იურიდიული პირის წარმომადგენელი: [illegible]
ავტომობილის მარკა [illegible] ავტომ. ნომერი [illegible]
მძღოლი [illegible]

#	ნარჩენის ტიპი	რ-ბა [ტონა]	ერთეულის ფასი [დღგ-ს ჩათვლით]	ჯამი [დღგ-ს ჩათვლით]
1	[illegible]	32,900	10	329,0
2				
3				

სულ 329,0 ლარი

თანხა სიტყვიერად [illegible]

შენიშვნა:

დამატებითი ინფორმაცია:
[illegible]

⚠ გადარიცხვისას დანიშნულებაში აუცილებლად მიუთითეთ აქტის (აქტების) ნომერი!

მიმღების ხელმოწერა

შემომტანი ფიზ. / იურ. პირის ხელმოწერა

საკონტაქტო ინფორმაცია
ს/კ: 404942470
ქ. 14, თბილისი, 0186;
ტელ.: (+995) 32 / 243 88 30
www.waste.gov.ge info@waste.gov.ge

საბანკო რეკვიზიტები
მომსახურე ბანკი: სს "თიბისი ბანკი"
ბანკის კოდი: TBCBGE22
ანგარიშის ნომერი: GE 51TB 7161 9360 8010 0005
მიმღები: შპს "საქართველოს მყარი ნარჩენების მართვის კომპანია"

პოლიგონზე მყარი ნარჩენების განთავსების აქტი № 61576

თარიღი: [illegible]
რიცხვი თვე წელი

შპს საქართველოს მყარი ნარჩენების მართვის კომპანია
LTD SOLID WASTE MANAGEMENT COMPANY OF GEORGIA

შპს "საქართველოს მყარი ნარჩენების მართვის კომპანია"

ხელშეკრულების № ____
(არსებობის შემთხვევაში)

ნაგავსაყრელის მდებარეობა: [illegible]
მიმღების სახელი: [illegible]
მიმღების გვარი: [illegible]
მიმღების თანამდ.: [illegible]

ფიზიკური / იურიდიული პირის დასახელება: [illegible]
პირადი ნომერი / საიდენტიფიკაციო კოდი: [illegible]
საკონტაქტო ინფორმაცია: [illegible]
იურიდიული პირის წარმომადგენელი: [illegible]
ავტომობილის მარკა [illegible] ავტომ. ნომერი [illegible]
მძღოლი [illegible]

#	ნარჩენის ტიპი	რ-ბა [ტონა]	ერთეულის ფასი [დღგ-ს ჩათვლით]	ჯამი [დღგ-ს ჩათვლით]
1	[illegible]	28,960	10	289,60
2				
3				

სულ 289,60 ლარი

თანხა სიტყვიერად [illegible]

შენიშვნა:

დამატებითი ინფორმაცია:
[illegible]

⚠ გადარიცხვისას დანიშნულებაში აუცილებლად მიუთითეთ აქტის (აქტების) ნომერი!

მიმღების ხელმოწერა

შემომტანი ფიზ. / იურ. პირის ხელმოწერა

საკონტაქტო ინფორმაცია
ს/კ: 404942470

საბანკო რეკვიზიტები
მომსახურე ბანკი: სს "თიბისი ბანკი"